

DELAWARE PANDEMIC INFLUENZA PLAN

Table of Contents

	<u>Page</u>
1.0 Purpose.....	3
2.0 Planning Assumptions and Background.....	3
3.0 Concept Of Operations.....	7
3.1 Pandemic Phases and Periods.....	7
Table 3-1 Stages of a Pandemic	8
3.2 General.....	9
4.0 Agencies	10
5.0 Roles and Responsibilities	11
6.0 Surveillance	27
7.0 Laboratory Diagnostics	30
8.0 Medical Surge Capacity	31
9.0 Vaccine Management and Immunization	32
10.0 Vaccination Dispensing	35
11.0 Vaccination Priority Groups.....	36
12.0 Influenza Antiviral Medications.....	38
Table 2-Antiviral Medication for Treatment and Prophylaxis of Influenza.....	39
Table 3-Antiviral Medication Priority Group Distribution Protocols.....	42
13.0 Infection Control.....	43
14.0 Health and Risk Communications.....	44
15.0 Command and Control.....	46
16.0 Plan Development and Maintenance.....	47
Figure 1 Delaware Pandemic Preparedness Coordination Committee	48

17.0 Training and Exercises	49
18.0 Evaluation and Quality Improvement	49
Tab A Glossary.....	50
Tab B References	52
Tab C World Health Organization (WHO) Phases and Periods and Appropriate SHOC Activation.....	53
Tab D Acronyms	56
Tab E Forms.....	58
Tab F Distribution	64

This plan is intended to be used as a guide. As such, it does not address all conceivable situations or contingencies and should not be used as a substitute for sound judgment.

1.0 Purpose

- 1.1 Provides a guideline for the State of Delaware to prepare and respond to a pandemic influenza outbreak.
- 1.2 Outlines preparedness actions during the inter-pandemic period to strengthen capabilities for an effective response to a pandemic influenza outbreak and to minimize the risk of transmissions to humans by situation monitoring and assessment, prevention and containment, health system response, communication, and planning and coordination.
- 1.3 Outlines response actions during a pandemic alert and/or pandemic period to ensure rapid characterization of the new virus subtype, maximize efforts to contain and delay the spread to possibly avert a pandemic, and to minimize the impact of the pandemic by situation monitoring and assessment, prevention and containment, health system response, communication, and planning and coordination.
- 1.4 Defines the roles and responsibilities for the Division of Public Health (DPH), other primary state agencies, and outside partners during the different phases and periods of inter-pandemic, pandemic alert, and pandemic influenza.
- 1.5 Outlines the command and control and management structure during the different phases and periods of inter-pandemic, pandemic alert, and pandemic influenza.

2.0 Planning Assumptions and Background

2.1 Planning Specific

- 2.1.1 The Governor of Delaware may declare a State of Emergency resulting from a Public Health Emergency in order to provide effective command and control for response to a pandemic influenza. The Delaware Emergency Management Agency (DEMA) will act as the lead agency for the Department of Safety and Homeland Security to coordinate these operations. DEMA will coordinate operations through the Delaware Emergency Operations Center (EOC) as described in the *Delaware Emergency Operations Plan* and *Emergency Support Function 8–Public Health and Medical Services* to that plan.
- 2.1.2 The Division of Public Health's (DPH) response to a pandemic influenza will be coordinated and controlled from the State Health Operations Center (SHOC). Operation of the State Health Operations Center (SHOC) is described in detail in the *State Health Operations Center Plan*.
- 2.1.3 Some specific social interventions and/or containment measures, such as isolation and quarantine, snow days, travel restrictions, and/or cancel of public venues may be required to slow the spread of disease.

- 2.1.4 Specific policies, processes, and procedures to be used for isolation and quarantine are described in the *Delaware Contagious Disease Containment Measures Plan*.
- 2.1.5 Reference Delaware Code § 505 of Title 16 & *Communicable Diseases; Regulations; Quarantine* § 3136 of Title 20 *Isolation and Quarantine during Public Health Emergency*.
- 2.1.6 Effective prevention and therapeutic measures, including vaccine and antiviral medications could be delayed and in short supply.
- 2.1.7 The Division of Public Health will work with healthcare providers to coordinate distribution of vaccines and antiviral medications.
- 2.1.8 Response to the pandemic will require swift and coordinated action by all levels of government.
- 2.1.9 Hospitals and outpatient care facilities will need to expand their capacity to accommodate anticipated patient loads.
- 2.1.10 Healthcare workers and other first responders may be at a higher risk of exposure and illness than the general population, further straining the healthcare system.
- 2.1.11 Widespread illness in the state could increase the likelihood of sudden and potentially significant shortages of personnel in other sectors who provide critical public safety and necessary services.
- 2.1.12 When a Pandemic Influenza A virus is identified, it will likely take between three to six months to produce and deliver sufficient vaccine to inoculate the entire U.S. population.
- 2.1.13 The Federal Government's National Strategy for Pandemic Influenza Implementation Plan clarifies the roles and responsibilities of governmental and non-governmental entities, including Federal, State, local, tribal authorities and regional, national, and international stakeholders, and provides preparedness guidance for all segments of society.

2.2 Disease and Pandemic Specific

- 2.2.1 Influenza causes seasonal epidemics resulting in an average of 36,000 deaths in the United States each year.
- 2.2.2 Influenza viruses are grouped into three types, designated A, B, and C.
 - 2.2.2.1 Type C viruses are common but usually cause no symptoms or only very mild respiratory illness. They are not considered of public health concern.
 - 2.2.2.2 Type B viruses cause sporadic outbreaks of more respiratory disease, particularly among young children in school settings.

- 2.2.2.3 Type A viruses are unique because they can infect both humans and animals and are usually associated with more severe illnesses and are the cause of global pandemic outbreaks.
- 2.2.2.4 There are many different subtypes of Influenza or “flu” viruses. The subtypes differ based upon certain proteins on the surface of the virus (the hemagglutinin or “HA” protein and the neuraminidase or the “NA” protein).
- 2.2.3 Pandemic influenzas are expected but unpredictable and arrive with very little warning.
- 2.2.4 A pandemic or global epidemic may occur following a major mutation of the influenza A virus, and people are exposed to the new virus.
- 2.2.5 Certain conditions make an pandemic influenza more likely:
 - 2.2.5.1 A new influenza A virus emerges as a result of a process called antigenic shift;
 - 2.2.5.2 A susceptible population with little or no immunity;
 - 2.2.5.3 A virus transmitted efficiently from person-to-person, and/or;
 - 2.2.5.4 A virulent virus with the capacity to cause serious illness and death.
- 2.2.6 These changes are caused by new combinations of the HA and/or NA proteins on the surface virus. Such changes result in a new influenza virus subtype.
- 2.2.7 The appearance of a new influenza A virus subtype is the first step toward a pandemic; however, to cause a pandemic, the virus subtype also must have the capacity to spread easily from person to person.
- 2.2.8 During the next pandemic influenza the estimated morbidity and mortality nationwide and in the state of Delaware are shown below:

Characteristic	United States	State of Delaware
Illness	90 million (30%)	252,000 (30%)
Outpatient Medical Care	45 million (50%)	126,000 (50%)
Hospitalization	865,00 to 9,900,00	2,187 to 13,122
Deaths	209,000 to 1,903,000	502 to 3,014

* Estimates based on past pandemics of 1918 (severe) and 1958/1968 (moderate/low). Delaware population used was 840,000.

- 2.2.9 Multiple waves (periods during which community outbreaks occur across the state) of illness could occur with each wave lasting 2-3 months. Historically, the largest waves have occurred in the fall and winter, but the seasonality of a pandemic cannot be predicted with certainty.
- 2.2.10 Historic evidence suggests that pandemics occurred three to four times per century.
- 2.2.11 During the 20th century, the emergence of several new influenza A virus subtypes caused three pandemics, all of which spread around the world within a year of being detected.
 - 2.2.11.1 1918-19, "Spanish flu," [A (H1N1)], caused the highest number of known influenza deaths. (However, the actual influenza virus subtype was not detected in the 1918-19 pandemic). More than 500,000 people died in the United States, and up to 50 million people may have died worldwide. Many people died within the first few days after infection, and others died of secondary complications. Nearly half of those who died were young, healthy adults. Influenza A (H1N1) viruses still circulate today after being introduced again into the human population in 1977.
 - 2.2.11.2 1957-58, "Asian flu," [A (H2N2)], caused about 70,000 deaths in the United States. First identified in China in late February 1957, the Asian flu spread to the United States by June 1957.
 - 2.2.11.3 1968-69, "Hong Kong flu," [A (H3N2)], caused about 34,000 deaths in the United States. This virus was first detected in Hong Kong in early 1968 and spread to the United States later that year. Influenza A (H3N2) viruses still circulate today.
 - 2.2.11.4 Both the 1957-58 and 1968-69 pandemics were caused by viruses containing a combination of genes from a human influenza virus and an avian influenza virus. The 1918-19 pandemic virus appears to have an avian origin.
- 2.2.12 **H5N1 Avian Influenza.** Although it is unpredictable when the next pandemic will occur and what strain may cause it, the continued and expanded spread of a highly pathogenic—and now endemic—avian H5N1 virus across much of eastern Asia, Russia, and eastern Europe represents a significant pandemic threat. Human virus from the H5N1 influenza virus was first recognized in 1997 when it infected 18 people in Hong Kong, causing 6 deaths.
- 2.2.13 While H5N1 is the greatest current pandemic threat, other avian influenza subtypes have also infected people in recent years. In 1999, H9N2 infections were identified in Hong Kong; in 2003, H7N7 infections occurred in the Netherlands; and in 2004, H7N3 infections occurred in Canada. Such outbreaks have the potential to give rise to the next pandemic, reinforcing the

need for continued surveillance and ongoing vaccine development efforts against these strains.

3.0 Concept Of Operations

3.1 Pandemic Phases and Periods

- 3.1.1 The World Health Organization (WHO) has defined a series of “Preparedness Phases and Periods” that can be applied before the beginning of a pandemic is declared. The definition of phases and periods described on the next page will provide a basis for DPH to determine its planning and response to such situations as they are assessed.
- 3.1.2 There are four (4) pandemic periods and six (6) phases described in Table 3-1:

Table 3-1 Stages of a Pandemic

PHASE	INTERPANDEMIC PERIOD	RATIONALE
Phase 1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.	It is likely that influenza subtypes that have caused human infection and/or disease will always be present in wild birds or other animal species. Lack of recognized animal or human infections does not mean that no action is needed. Preparedness requires planning and action in advance.
Phase 2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.	The presence of animal infection caused by a virus of known human pathogenicity may pose a substantial risk to human health and justify public health measures to protect persons at risk.
	PANDEMIC ALERT PERIOD	
Phase 3	Human infection(s) with a new subtype but no human-to-human spread, or at most rare instances of spread to a close contact.	The occurrence of cases of human disease increases the chance that the virus may adapt or reassort to become transmissible from human to human, especially if coinciding with a seasonal outbreak of influenza. Measures are needed to detect and prevent spread of disease. Rare instances of transmission to a close contact – for example, in a household or health-care setting – may occur, but do not alter the main attribute of this phase, i.e. that the virus is essentially not transmissible from human to human. Example-One or more unlinked human cases with a clear history of exposure to an animal source/non-human source (with laboratory confirmation in a WHO-designated reference laboratory).
Phase 4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	Virus has increased human-to-human transmissibility but is not well adapted to humans and remains highly localized, so that its spread may possibly be delayed or contained. Example-One or more clusters ¹ involving a small number of human cases, e.g. a cluster of <25 cases lasting <2 weeks.
Phase 5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans but may not yet be fully transmissible (substantial pandemic risk).	Virus is more adapted to humans, and therefore more easily transmissible among humans. It spreads in larger clusters, but spread is localized. This is likely to be the last chance for massive coordinated global intervention, targeted to one or more foci, to delay or contain spread. In view of possible delays in documenting spread of infection during pandemic <i>phase 4</i> , it is anticipated that there would be a low threshold for progressing to <i>phase 5</i> . Example-Ongoing cluster-related transmission, but total number of cases is not rapidly increasing, e.g. a cluster of 25–50 cases and lasting from 2 to 4 weeks.
	PANDEMIC PERIOD	
Phase 6	Pandemic: increased and sustained transmission in general population.	Major change in global surveillance and response strategy, since pandemic risk is imminent for all countries. The national response is determined primarily by the disease impact within the country.
	POST PANDEMIC PERIOD	
Post	Return to the Interpandemic Period (Phase 1)	

- 3.1.3 The distinction between **phases 1** and **2** is based on the risk of human infection or disease resulting from circulating strains in animals. The distinction is based on various factors and their relative importance according to current scientific knowledge. Factors may include pathogenicity in animals and humans, occurrence in domesticated animals and livestock or only in wildlife, whether the virus is enzootic or epizootic, geographically localized or widespread, and other scientific parameters.
- 3.1.4 The distinction among **phases 3, 4, and 5** is based on an assessment of the risk of a pandemic. Various factors and their relative importance according to current scientific knowledge may be considered. Factors may include rate of transmission, geographical location and spread, severity of illness, presence of genes from human strains (if derived from an animal strain), and other scientific parameters.

3.2 **General**

- 3.2.1 A response to a pandemic will largely reflect the states ability to coordinate a number of state agencies and outside partners to effectively plan well in advance and respond to such an event.
- 3.2.2 The inter-pandemic, pandemic alert, and pandemic response operations are implemented in several different phases and periods. These functions are, but are not limited to, situation monitoring and assessment, prevention and containment, health system response, communication, and planning and coordination.
- 3.2.3 The Division of Public Health (DPH) and the State Health Operations Center (SHOC) will provide command and control and management for planning and response during the inter-pandemic and pandemic alert periods and phases.
- 3.2.4 In preparation of a pandemic, DPH will monitor and provide yearly influenza vaccinations, procure and store antiviral medications in the In-state Stockpile (ISS) for public healthcare workers, first responders, and recommended priority groups, and administer influenza public education.
- 3.2.5 During the pandemic period or phase six, a State of Emergency will be declared and the Delaware Emergency Management Agency (DEMA) will act as the state's lead agency for the Department of Safety and Homeland Security. DEMA will provide operational coordination for all state agencies and outside partners, and the SHOC will delineate operational priorities and decisions for public health and the healthcare system.
- 3.2.6 During the pandemic period, the SHOC will provide vaccinations and antiviral medications to the public through the use of Neighborhood Emergency Help Centers (NEHC). The NEHC(s) will be staffed by DPH, DHSS, and other outside agencies.

- 3.2.7 During the pandemic period, hospitals, local healthcare providers, healthcare clinics, colleges and universities, and large employers with medical personnel will be asked to vaccinate their employees, families, and patients.
- 3.2.8 Containment Measures such as Isolation and Quarantine, snow days, and travel restrictions may be enforced throughout Delaware. Voluntary compliance is preferred.

4.0 Agencies

4.1 State Agencies

- 4.1.1 The Office of the Governor
- 4.1.2 Department of State
 - 4.1.2.1 Division of Professional Regulation (DPR)
- 4.1.3 Department of Agriculture (DDA)
- 4.1.4 Department of Education (DOE)
- 4.1.5 Department of Natural Resources and Environmental Control (DNREC)
- 4.1.6 Department of Safety and Homeland Security (DSHS)
 - 4.1.6.1 Delaware State Police (DSP)
 - 4.1.6.2 Delaware Emergency Management Agency (DEMA)
- 4.1.7 Department of Health and Social Services (DHSS)
 - 4.1.7.1 Division of Public Health (DPH)
 - 4.1.7.2 Division of Substance Abuse and Mental Health (DSAMH)
 - 4.1.7.3 Office of the Chief Medical Examiner (OCME)
 - 4.1.7.4 Division of Services for Aging Adults with Physical Disabilities (DSAAPD)
 - 4.1.7.5 Division of Social Services (DSS)
 - 4.1.7.6 Division of Long-Term Care Residents Protection (DLTCRP)
- 4.1.8 Delaware National Guard (DNG)
- 4.1.9 Delaware Department of Transportation (DelDOT)
- 4.1.10 Department of Services for Children, Youth, and Their Families (DSCYF)
- 4.1.11 Department of Corrections (DOC)

4.2 County and Local Agencies

- 4.2.1 County and Local Emergency Management Agencies
- 4.2.2 Local Law Enforcement Agencies

4.2.3 Emergency Medical Services (EMS)

4.3 Partner Organizations

4.3.1 Local Hospitals

4.3.2 Delaware Pharmacists Society (DPS)

4.3.3 Community Health Centers (CHC)

4.3.4 American Red Cross of the Delmarva Peninsula (ARC)

4.3.5 Medical Society of Delaware (MSD)

4.3.6 Delaware Healthcare Association (DHA)

4.3.7 Delaware Health Care Facilities Association (DHCFA)

4.3.8 Major Employers

4.3.9 Volunteer Organizations

4.3.10 Private Schools

4.3.11 Funeral Homes

4.3.12 Faith Based Organizations

4.4 Federal Agencies

4.4.1 U.S. Department of Health and Human Services (HHS)

4.4.2 Dover Air Force Base (DAFB)

5.0 Roles and Responsibilities

5.1 State Agencies

5.1.1 The Office of the Governor

5.1.1.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide oversight for pandemic influenza planning through the Public Health Emergency Planning Commission.

5.1.1.2 Pandemic Responsibilities

- Consider declaring a State of Emergency.
- Request the Strategic National Stockpile (SNS) from the Centers for Disease Control and Prevention (CDC).
- Coordinate and/or delegate public information efforts. Establish a Joint Information Center (JIC) in conjunction with DEMA and other state agencies, when necessary.

5.1.2 Department of State (Division of Professional Regulation)

5.1.2.1 Inter-pandemic and Pandemic Alert Responsibilities

- License healthcare professionals.
- Coordinate with DPH, the Medical Society of Delaware (MSD), provider organizations, and volunteers to develop plans for licensing healthcare professionals to meet contingency staffing requirements.

5.1.2.2 Pandemic Responsibilities

- Implement plans to credential licensed healthcare professionals to meet contingency staffing requirements.

5.1.3 Department of Agriculture (DDA)

5.1.3.1 Inter-pandemic and Pandemic Alert Responsibilities

- Conduct surveillance of disease outbreaks in poultry flocks.
- Destroy and disposes of infected flocks to limit the spread of disease to poultry workers.
- Coordinate with DPH about the results of surveillance activities.
- Coordinate with DPH to assure that agricultural workers are closely monitored and vaccinated or treated as needed.

5.1.3.2 Pandemic Responsibilities

- Increase surveillance of disease outbreaks in poultry flocks.
- Destroy and disposes of infected flocks to limit the spread of disease to poultry workers and contamination of the food supply.
- Coordinate with DPH about the results of surveillance activities.
- Coordinate with DPH to assure that agricultural workers are closely monitored, vaccinated, or treated as needed.

5.1.4 Department of Education (DOE)

5.1.4.1 Inter-pandemic and Pandemic Alert Responsibilities

- Monitor absentee rates in schools.
- Assist in providing infection control measures to the school nurses and schools to educate staff and students.

- Assist local school districts and individual schools with developing procedures in determining when and how to close schools, cancel non-essential meetings, etc.

5.1.4.2 Pandemic Responsibilities

- Analyze absentee rates.
- Disseminate infection control messages to school districts for students, faculty, and administrators.
- Assist local school districts and individual schools in determining when and how to close schools, cancel non-essential meetings, etc.
- Coordinate with DPH to vaccinate students and staff, as needed.
- Coordinate with the SHOC to provide facilities, if available, for operation of NEHC(s).

5.1.5 **Department of Natural Resources and Environmental Control (DNREC)**

5.1.5.1 Inter-pandemic and Pandemic Alert Responsibilities

- Conduct surveillance of wildlife habitat to assist in determining whether the disease is spreading through wildlife populations, if needed.
- Provide emergency procedures to close parks and recreation areas, if necessary, to prevent the spread of the disease.

5.1.5.2 Pandemic Responsibilities

- Implement increased surveillance of wildlife habitat, if needed and coordinate results with the SHOC Situation Unit.
- Close parks and recreation areas, if needed and post appropriate notices at these areas in order to limit the spread of the disease.

5.1.6 **Department of Safety and Homeland Security (DSHS)**

5.1.6.1 Inter-pandemic and Pandemic Alert Responsibilities

- Prepare to act as lead agency through DEMA during a State of Emergency for integration of state emergency management activities in support of pandemic influenza response efforts.
- Coordinate with DHSS to provide assistance in planning and preparations for a pandemic influenza.
- Review public safety and emergency response laws annually pertaining to the response and coordination of disasters and/or contagious disease outbreaks.

5.1.6.2 Pandemic Responsibilities

- Act as lead agency through DEMA for integration of state emergency management activities in support of pandemic influenza response efforts if a State of Emergency is declared.
- Provide oversight for state response operations.

5.1.7 Delaware State Police (DSP)

5.1.7.1 Inter-pandemic and Pandemic Alert Responsibilities

- Prepare to provide crowd control and traffic support for vaccination clinics (NEHCs) and inpatient treatment centers (ACCs).
- Prepare to enforce containment measures such as isolation and quarantine orders, travel restrictions, and closure of public venues to limit the spread of the disease in accordance with the *Delaware Contagious Disease Containment Measures Plan*.

5.1.7.2 Pandemic Responsibilities

- Provide crowd control and traffic support for vaccination clinics (NEHCs) and inpatient treatment centers (ACCs).
- If required, provide oversight for vaccine shipments and security for the Receiving, Staging, and Storing (RSS) site for the Strategic National Stockpile (SNS) assets.
- Enforce containment measures such as isolation and quarantine orders, travel restrictions, and closure of public venues to limit the spread of the disease in accordance with the *Delaware Contagious Disease Containment Measures Plan*.

5.1.8 Delaware Emergency Management Agency (DEMA)

5.1.8.1 Inter-pandemic and Pandemic Alert Responsibilities

- Prepare to act as the lead state agency for coordination of response to a pandemic influenza in Delaware.
- Coordinate with DPH to prepare plans needed for an effective response to a pandemic influenza.
- Assist the Office of the Governor and DHSS in preparing a State of Emergency declaration.
- Prepare to provide oversight of operations of the state EOC in support of a pandemic influenza response.
- Coordinate with surrounding states and jurisdictions for available resource sharing through the use of Emergency Management Assistance Compacts (EMAC)

5.1.8.2 Pandemic Responsibilities

- Assist the Office of the Governor and DHSS in preparing a State of Emergency declaration.
- Act as the lead state agency for coordination of response to a pandemic influenza in Delaware.
- Activate the EOC to provide overall command and control for state pandemic influenza operations.
- Process the request from the State Health Officer (SHO) to the Governor for delivery of the SNS assets.
- Activate the Joint Information Center (JIC), Emergency Alerting System (EAS), Delaware Emergency Notification System (DENS) and other communication systems to support response operations, if deemed necessary.
- Coordinate and assists to maintain essential services for individuals who are isolated, quarantined, and/or homebound due to pandemic influenza. Essential services may include water, food, medical care, and financial support.
- Coordinate, as needed, and provides, within overall capabilities, the equipment, supplies, transportation, personnel, and other support requested by the SHOC to conduct effective response operations.
- Coordinate with the SHOC, as required, to obtain DPH support for overall state response efforts.

5.1.9 Department of Health and Social Services (DHSS)

5.1.9.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide support and personnel for DPH pandemic influenza preparations.

5.1.9.2 Pandemic Responsibilities

- Provide assistance, as required, to support response operations.
- Provide personnel to support NEHCs.

5.1.10 Division of Public Health

5.1.10.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide oversight for pandemic influenza, disease surveillance, laboratory assessment, vaccine management, immunization, medical surge, mass fatality, influenza public education, and health and risk communication planning.

- Coordinate with other state agencies and partners on pandemic influenza planning and preparedness (i.e. Department of Corrections (DOC), county governments, local municipalities, etc).
- Procure and store stocks of vaccine(s) and antiviral medications for use in DPH clinics.
- Coordinate with hospitals and healthcare facilities in planning of patient treatment and medical surge.
- Coordinate with providers to protect and treat residents of long-term care facilities during a pandemic outbreak.
- Coordinate with administrators through the Department of Services for Children, Youth, and Their Families (DSCYF) and DOE to prepare to implement disease containment training for their staff, identify supplies and equipment needed to screen students for influenza-like illness (ILI), and care for students until such time as they can be taken home for care.
- Coordinate with funeral home directors to implement disease containment training for their staff, prioritize essential functions, and prepare to minimize mortuary service disruptions.
- Coordinate with religious and cultural groups to assist them in preparing to implement disease containment training and procedures.
- Coordinate with major employers to provide vaccination and treatment for employees and their families and students and to implement disease containment training and practices.
- Coordinate with colleges and universities to provide vaccination and treatment for employees and their families and students and to implement disease containment training and practices.
- Coordinate planning for stockpiling and distribution of vaccines, antiviral medications, and clinic supplies, staffing, and operation of DPH clinics.
- Coordinate with Department of Agriculture (DDA) in the development and maintenance of a plan to respond to an outbreak of Avian Influenza in chickens.
- Coordinate with surrounding states through the Cities Readiness Initiative (CRI) program to work on Memorandums of Understanding (MOU).
- Assure that training exercises are done once every other year on the *Pandemic Influenza Plan*.

- Make available influenza vaccine for staff and families.
- Review public health laws annually pertaining to the response and coordination of disasters and/or contagious disease outbreaks.

5.1.10.2 Pandemic Responsibilities

- Activate the SHOC to provide command and control for pandemic influenza, surveillance, laboratory assessment, vaccine management, immunization, medical surge, mass fatality, and health and risk communication response.
- Coordinate and assist in the management of patient treatment and medical surge with hospitals and healthcare facilities.
- Initiate media contacts in conjunction with DEMA and the Governors Office to announce facts surrounding current situation and where the public is to report for treatment. DEMA may activate a Joint Information Center (JIC) with several state agency participants to inform the media and public.
- Develop and distributes patient care guidelines and infection control procedures to hospitals, healthcare facilities, DOE, major employers, universities and colleges, community health centers (CHC), and EMS.
- Notify providers of long-term care facilities about the need to protect residents.
- Notify administrators through DSCYF and DOE about the need to provide disease containment refresher training for their staff.
- Notify funeral home directors about the need to implement disease containment refresher training for their staff.
- Coordinate with religious and cultural groups to assist them in implementing disease containment training and procedures.
- Provide information to major employers about the effective treatment and infection control practices.
- Provide information to colleges and universities about the effective treatment and infection control practices.
- Provide information to healthcare providers about the effective treatment and infection control practices.
- Coordinate distribution of vaccines, antiviral medications, clinic supplies, staffing, and operation of DPH vaccination clinics and/or NEHC facilities.

- Coordinate distribution of vaccines and antiviral medications to hospitals, local healthcare providers, healthcare clinics, and large employers with medical personnel.
- If Strategic National Stockpile (SNS) antiviral resources are deployed to the state, DPH will provide oversight through the SHOC for receiving, staging, storing, and dispensing as described in the *Strategic National Stockpile Plan*.

5.1.11 Division of Substance Abuse and Mental Health

5.1.11.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide mental health training, as needed.
- Plan for mental health support to the SHOC and other locations, when necessary.
- Plan for mental health support to NEHC and ACC operations, within capabilities, by providing mental health expertise.

5.1.11.2 Pandemic Responsibilities

- Implement plans to support SHOC, NEHC, and ACC operations, within capabilities.
- Review public messages for appropriateness and clarity.

5.1.12 Office of the Chief Medical Examiner (OCME)

5.1.12.1 Inter-pandemic and Pandemic Alert Responsibilities

- Investigate influenza-like illness (ILI) deaths and provide scientific data to the State Epidemiologist.
- Provide specimens to the Delaware Public Health Laboratory (DPHL) for confirmation of type of influenza virus.
- Prepare and provides support for multiple fatality planning.

5.1.12.2 Pandemic Responsibilities

- Investigate influenza deaths and provide scientific data to the Situation Branch Director in the SHOC.
- Provide specimens to DPHL for confirmation of type of influenza virus.
- Prepare and provide support for multiple fatalities and coordinate with the Multiple Fatality Group Supervisor in the SHOC.

5.1.13 **Delaware National Guard (DNG)**

5.1.13.1 Inter-pandemic and Pandemic Alert Responsibilities

- Prepare to support pandemic response requirements for transportation that are beyond the existing capabilities of state agencies.
- Prepare to provide supplementary staffing to state and local response organizations consistent with other mission requirements and federal law.
- Assist in SNS planning and preparedness.

5.1.13.2 Pandemic Responsibilities

- Support transportation requirements beyond the existing capabilities of state agencies.
- Provide supplementary staffing to state and local response organizations consistent with other mission requirements and federal law such as law enforcement, SNS, Receipt, Staging and Storage (RSS) site support, Medical Needs Shelter (MNS) staffing, and transportation.
- Assist law enforcement as necessary.

5.1.14 **Delaware Department of Transportation (DelDOT)**

5.1.14.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide support and personnel for pandemic influenza preparations.

5.1.14.2 Pandemic Responsibilities

- Provide traffic control measure at the NEHCs and other points of dispensing.

5.1.15 **Department of Services for Children, Youth, and Their Families (DSCYF)**

5.1.15.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide support and personnel for pandemic influenza preparations.

5.1.15.2 Pandemic Responsibilities

- Provide infection control measures training and information for children, under their care, and personnel.
- Assist and provide counseling services for children during a pandemic influenza.

5.1.16 Department of Corrections (DOC)

5.1.16.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide support and personnel for pandemic influenza preparations.

5.1.16.2 Pandemic Responsibilities

- Provide infection control measures training and information for the correctional officers, personnel, and inmates.
- Provide vaccinations and/or antiviral medications to correctional officers, personnel, and inmates, if available. DOC must follow the state vaccination and dispensing priority group protocols.
- Enforce isolation and quarantine measure for inmates.
- Provide appropriate personal protective equipment (PPE) to personnel.

5.2 County and Local Agencies

5.2.1 County and Local Emergency Management Agencies

5.2.1.1 Inter-pandemic and Pandemic Alert Responsibilities

- Plan for support of local healthcare providers.
- Prepare to maintain essential community services for the duration of the pandemic.

5.2.1.2 Pandemic Responsibilities

- Coordinate with state and other agencies to provide support to local healthcare providers.
- Coordinate with state and other agencies to maintain essential community services for the duration of the pandemic.

5.2.2 Local Law Enforcement Agencies

5.2.2.1 Inter-pandemic and Pandemic Alert Responsibilities

- Participate in planning to provide crowd control and traffic support for clinics, healthcare facilities, hospitals, and ACC(s).
- Participate in planning and training on enforcing containment measures such as isolation and quarantine orders, travel restrictions, and closure of public venues to limit the spread of the disease in accordance with the *Delaware Contagious Disease Containment Measures Plan*.

5.2.2.2 Pandemic Responsibilities

- Provide crowd control and traffic support for NEHCs, clinics, healthcare facilities, hospitals, and ACC(s).
- Enforce containment measures such as isolation and quarantine orders, travel restrictions, and closure of public venues to limit the spread of the disease in accordance with the *Delaware Contagious Disease Containment Measures Plan*.

5.2.3 Emergency Medical Services (EMS)

5.2.3.1 Inter-pandemic and Pandemic Alert Responsibilities

- Plan for identifying, treating, and transporting patients during pandemic influenza outbreaks.

5.2.3.2 Pandemic Responsibilities

- Provide support for identifying, treating, and transporting patients during pandemic influenza outbreaks.
- Provide EMT-B(s) for supporting Neighborhood Emergency Help Centers and Acute Care Centers, if available.
- Provide appropriate personal protective equipment (PPE) to personnel.

5.3 Partner Organizations

5.3.1 Local Hospitals

5.3.1.1 Inter-pandemic and Pandemic Alert Responsibilities

- Prepare to treat significantly increased patient numbers during a pandemic influenza.
- Coordinate with the DPH during inter-pandemic periods to expand their capabilities for treatment of patients through internal surge plans and activation of ACC(s). Procedures for activation and operation of these facilities are described in the *Acute Care Center Plan*.
- Stockpile antiviral medications, antibiotics, PPE, and vaccine, if available, for treatment of patients and prophylaxis of staff and families.

5.3.1.2 Pandemic Responsibilities

- Activate internal surge capacity plans.
- Treat patients in existing facilities within capabilities.
- Coordinate with SHOC and LTC facilities to move non-affected patients to LTC facilities.

- Coordinate with the SHOC to activate and operate ACC(s) as described in the *Acute Care Center Plan*.
- Vaccinate staff and their families.
- Provide appropriate personal protective equipment (PPE) to personnel.

5.3.2 **Delaware Pharmacists Society (DPS)**

5.3.2.1 Inter-pandemic and Pandemic Alert Responsibilities

- Coordinate with members to disseminate information about vaccine and antiviral drug effectiveness.
- Coordinate with members to assist in vaccination campaigns and antiviral dispensing clinics.

5.3.2.2 Pandemic Responsibilities

- Coordinate with members to disseminate information about vaccine and antiviral drug effectiveness.
- Assist in vaccination clinics as requested by DPH.

5.3.3 **Community Health Centers (CHC)**

5.3.3.1 Inter-pandemic and Pandemic Alert Responsibilities

- Develop plans to provide vaccination and treatment for regular patients.
- Develop plans to host activation of NEHC(s), if required, to support mass vaccination programs.
- Develop plans to assist with patient treatment to supplement hospital surge, if necessary.
- Vaccinate staff and their families.

5.3.3.2 Pandemic Responsibilities

- Continue to provide vaccination and treatment, within capabilities for regular patients.
- Implement plans to assist with patient treatment to supplement hospital surge, if necessary.
- Host activation of NEHC(s), if required, to support mass vaccination programs.

5.3.4 American Red Cross of the Delmarva Peninsula (ARC)

5.3.4.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide support and personnel for pandemic influenza preparations.

5.3.4.2 Pandemic Responsibilities

- Assist in providing food and other essential services to individuals who are isolated, quarantined, and/or homebound.
- Assist in providing volunteers at NEHC(s).

5.3.5 Medical Society of Delaware

5.3.5.1 Inter-pandemic and Pandemic Alert Responsibilities

- Assist members in pandemic influenza preparations.

5.3.5.2 Pandemic Responsibilities

- Coordinate with the SHOC for the distribution of influenza information to providers.
- May serve in an advisory capacity to DPH

5.3.6 Delaware Healthcare Association

5.3.6.1 Inter-pandemic and Pandemic Alert Responsibilities

- Assist members in pandemic influenza preparations.

5.3.6.2 Pandemic Responsibilities

- Provide support for SHOC and ACC operations within capabilities.
- May serve in an advisory capacity to DPH

5.3.7 Delaware Health Care Facilities Association (DHCFA)

5.3.7.1 Inter-pandemic and Pandemic Alert Responsibilities

- Assist members in pandemic influenza preparations.

5.3.7.2 Pandemic Responsibilities

- Assist members in the coordination of vaccinating and dispensing of antiviral medications to Long Term Care Facilities' employees and residents.

5.3.8 Major Employers

5.3.8.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide pandemic influenza preparedness information to employees.

- Provide support and personnel for pandemic influenza preparations.

5.3.8.2 Pandemic Responsibilities

- Vaccinate and dispense antiviral medications to employees and families if capable.
- Provide pandemic influenza information to employees and families.

5.3.9 Volunteer Organizations

5.3.9.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide support and personnel for pandemic influenza preparations.

5.3.9.2 Pandemic Responsibilities

- Assist in providing food and other essential services to individuals who are isolated or quarantined at the home.
- Assist in providing volunteers at NEHC(s).

5.3.10 Private Schools

5.3.10.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide support and personnel for pandemic influenza preparations.
- Provide infection control measures to the school nurses and educate staff and students
- Monitor absentee rates in school.
- Develop procedures in determining when and how to close schools, cancel non-essential meetings, etc.

5.3.10.2 Pandemic Responsibilities

- Analyze absentee rates.
- Disseminate infection control messages to students, faculty, and administrators.
- Coordinate with DPH, if necessary.

5.3.11 Funeral Homes

5.3.11.1 Inter-pandemic and Pandemic Alert Responsibilities

- Coordinate with DPH to implement disease containment training for personnel, prioritize essential functions, and prepare to minimize mortuary service disruptions.

- Identify and train essential staff (including full-time, part-time and unpaid or volunteer staff) needed to continue operations during a pandemic.

5.3.11.2 Pandemic Responsibilities

- Implement disease containment refresher training for staff.
- Coordinate efforts with DPH on mortuary services, if necessary.

5.3.12 Faith Based Organizations

5.3.12.1 Inter-pandemic and Pandemic Alert Responsibilities

- Coordinate with DPH to implement disease containment training and procedures for personnel and members and support pandemic influenza preparedness.
- Identify and train essential staff (including full-time, part-time and unpaid or volunteer staff) needed to continue operations during a pandemic.

5.3.12.2 Pandemic Responsibilities

- Assist in providing services that are most needed during a pandemic (i.e. mental/spiritual health, social services, etc.).
- Work with DPH and other emergency response agencies to assist in providing social services.

5.4 Federal Agencies

5.4.1 US Department of Health and Human Services (HHS)

5.4.1.1 Inter-pandemic and Pandemic Alert Responsibilities

- Conduct national and global surveillance to detect new strains of the influenza “A” virus that are easily transmitted between humans.
- Investigate national and global influenza outbreaks.
- Develop diagnostic protocols and recommends reagents to detect influenza outbreaks.
- Develop reference strains and recommends reagents for use in vaccine production.
- Evaluate the safety and efficacy of vaccines and license their use.
- Determine populations at the greatest risk from infection and develops strategies for vaccination and antiviral use.
- Assess the need for and recommends measures to decrease transmission.

- Deploy federally-purchased vaccines.
- Deploy federally-purchased antiviral medications in the Strategic National Stockpile.
- Equip, train, and deploy the Commissioned Corps Readiness Force (CCRF) and Epidemiological Intelligence Service (EIS) officers when appropriate.

5.4.1.2 Pandemic Responsibilities

- Coordinate national response to the pandemic event.
- Implement travel advisories, precautions, or restrictions, as appropriate.
- Assist in investigating potential cases of pandemic influenza.
- Develop immunization and treatment protocols for use by states.
- Monitor the virulence and lethality of disease strain(s).
- Deploy federally-purchased vaccines.
- Deploy federally-purchased antiviral medications in the Strategic National Stockpile.

5.4.1.3 Reference *HHS Pandemic Influenza Plan*, Roles and Responsibilities of HHS, page 20-40.

5.4.2 **Dover Air-Force Base (DAFB)**

5.4.2.1 Inter-pandemic and Pandemic Alert Responsibilities

- Provide pandemic influenza preparedness information to personnel and families.
- Provide support and personnel for state pandemic influenza preparations.

5.4.2.2 Pandemic Responsibilities

- Vaccinate and dispense antiviral medications to personnel and families.
- Provide pandemic influenza information to personnel and families.
- Assist state in containment measure, mortuary service, and security, if applicable and approved by the federal government.

6.0 Surveillance

Early warning of a pandemic and our ability to closely track the spread of influenza outbreak is critical to being able to rapidly employ resources to contain the spread of the virus. The Health Information Management and Epidemiology Section for DPH provides oversight and maintains the disease surveillance system for reportable conditions in Delaware including influenza A viruses during Inter-Pandemic and Pandemic Alert Periods. Delaware's surveillance system has four main components: *passive surveillance*, *active sentinel surveillance*, *laboratory surveillance*, and *animal surveillance*.

6.1 Inter-Pandemic and Pandemic Alert Surveillance (Phase 1 to 5)

6.1.1 During Inter-Pandemic and Pandemic Alert Periods, Delaware will utilize four surveillance components to monitor and track influenza viruses:

- 6.1.1.1 *Passive surveillance.* Passive surveillance utilizes influenza information received from physicians, hospitals, blood banks, laboratories, schools, and cases identified by public health investigations who are required by the regulations for disease reporting and control to report influenza cases in Delaware to DPH
- 6.1.1.2 *Active surveillance or enhanced surveillance.* During the influenza season DPH will request data on a regular basis from the healthcare community (physicians, hospitals, and healthcare clinics) to report the number of patients presenting at their offices with ILI. The program is used from October through May each year, regardless of whether a pandemic influenza exists. Weekly analysis of associated demographic and syndromic data assists in characterizing the virulence and morbidity of associated virus strains.
- 6.1.1.3 *Laboratory Surveillance or Virologic Surveillance.* The Delaware Public Health Laboratory, which is a Biosafety Security Level 3 Laboratory (BSL 3), will identify and characterize circulating influenza strains to monitor trends and compare seasonal differences. Information on influenza strains present in the state will be reported to the National Respiratory and Enteric Virus Surveillance System (NREVSS) and the CDC.
- 6.1.1.4 *Animal Surveillance.* The Delaware Department of Agriculture (DDA) maintains surveillance on the poultry industry in Delaware for avian influenza. Testing for avian influenza is performed in the DDA laboratories in Dover and the National Veterinary Service Lab in Iowa. The Department of Natural Resources and Environmental Control (DNREC) maintains surveillance on the wildlife especially the migratory bird population. Reference the *Catastrophic Poultry Disease Procedures* from the DDA.

6.1.2 Reporting

- 6.1.2.1 All reports of morbidity from the health community are recorded on the official Disease Report Form and/or entered into the Delaware Electronic Reporting and Surveillance System (DERSS).
- 6.1.2.2 Once the Health Information Management and Epidemiology Section receives the report, Epidemiologist will investigate and follow-up on reports when needed, compiling the disease report data received and producing summaries of disease information for local, statewide, and federal surveillance systems, and analyzing reported data to make decisions about resources needed for disease control and public health response.
- 6.1.2.3 When directed by the DPH Director, acting as SHOC Incident Commander, the Planning Section Chief will assemble and dispatch Investigative Response Teams (IRTs) to conduct field investigation of disease cases, patterns, etc through the IRT Unit Leader. Procedures used by IRT(s) to conduct field epidemiological investigations are described in detail in DPH *Investigative Response Team Standard Operating Guidelines*.
- 6.1.2.4 The data collected by the Health Information Management and Epidemiology Sections is then reported to the CDC, which is used in their national surveillance programs for selected diseases, such as influenza, and for the Morbidity and Mortality Weekly Report (MMWR).

6.1.3 National Surveillance

National surveillance system in the United States is coordinated by the CDC, with state health departments assuming primary responsibility for carrying out virologic, mortality, and morbidity components.

- 6.1.3.1 The U.S. influenza surveillance system has different components that allows the State of Delaware to:

- Find out when and where influenza activity is occurring;
- Determine what types of influenza viruses are circulating;
- Detect changes in the influenza viruses;
- Track influenza-like illness (ILI); and
- Measure the impact influenza is having on deaths in the U.S.

- 6.1.3.2 **The Seven Components of National Influenza Surveillance:**

- **WHO and National Respiratory and Enteric Virus Surveillance System (NREVSS) Collaborating Laboratories.** About 75 WHO and 50 NREVSS collaborating laboratories located throughout the U.S. report total number of respiratory

specimens tested and the number for influenza A and B each week.

- **U.S. Influenza Sentinel Providers Surveillance Network.** Each week, approximately 1,000 health-care providers around the country report the total number of patients seen and the number of those patients with ILI by age group.
- **122 Cities Mortality Reporting System.** Each week, the vital statistics offices of 122 cities report the total number of death certificates filed and the number of those for which pneumonia or influenza was listed as the underlying or as a contributing cause of death.
- **State and Territorial Epidemiologists Reports.** State health departments report the estimated level of influenza activity in their states each week. States report influenza activity as no activity, sporadic, local, regional, or widespread.
- **Influenza-associated pediatric mortality.** Laboratory-confirmed influenza-associated deaths in children less than 18 years old are reported through the Nationally Notifiable Disease Surveillance System (NNDSS).
- **Emerging Infections Program (EIP).** The EIP conducts surveillance for laboratory-confirmed influenza related hospitalizations in persons less than 18 years of age in 57 counties covering 11 metropolitan areas of 10 states.
- **New Vaccine Surveillance Network (NVSN).** The NVSN provides population-based estimates of laboratory-confirmed influenza hospitalization rates for children less than five years old residing in three counties: Hamilton County (OH), Davidson County (TN), and Monroe County (NY).

6.1.4 Reference the *HHS Pandemic Influenza Plan*, Supplement 1 Pandemic Influenza Surveillance, pages S1-1-19.

6.2 Pandemic Surveillance (Phase 6)

6.2.1 During an actual pandemic influenza the SHOC is activated and oversight for surveillance activities is provided by the Planning Section Chief. Oversight for IRT activities is coordinated by the IRT Unit Leader.

6.2.2 In addition to inter-pandemic and pandemic alert surveillance activities, the following, additional surveillance operations will be initiated:

6.2.2.1 Daily monitoring of influenza activity reports from hospitals;

6.2.2.2 Analysis of disease surveillance data from participating healthcare providers;

- 6.2.2.3 Review of reports of non-hospital, influenza-related deaths;
 - 6.2.2.4 Coordination with public health epidemiologists in neighboring jurisdictions and at CDC to monitor regional and national disease patterns; and
 - 6.2.2.5 Investigation of new disease outbreaks, particularly outbreaks that can be linked to recent travel to the Far East.
- 6.2.3 Reference the *HHS Pandemic Influenza Plan*, Supplement 1 Pandemic Influenza Surveillance, pages S1-1-19.

7.0 Laboratory Diagnostics

The Delaware Public Health Laboratory (DPHL) provides the methodology and recommendations for actions for laboratory testing in the state of Delaware in the event of a biological event such as a pandemic influenza, chemical terrorism, bioterrorism, and/or public health event. DPHL is responsible for accurate and timely testing of clinical specimens for the detection of influenza, providing results to clients, and communication with the CDC on matters of technical testing.

During the earliest stages of a pandemic, the DPHL and hospital laboratories might receive a large and potentially overwhelming volume of clinical specimens. Pre-planning is essential to ensure timeliness of diagnostic testing and the availability of diagnostic supplies and reagents, address staffing issues, and disseminates protocols for safe handling and shipping of specimens. The DPHL will work with hospital laboratories to address laboratory surge capacity issues and train personnel in management of respiratory specimens during a pandemic influenza. Laboratories should institute surveillance for ILI among laboratory personnel working with novel influenza viruses.

7.1 Inter-Pandemic and Pandemic Alert Periods

- 7.1.1 The Director of DPHL provides oversight for laboratory assessment operations during inter-pandemic and pandemic alert periods.
- 7.1.2 DPHL analyzes strains of influenza virus collected from sentinel physicians in Delaware. These nasopharyngeal specimens are tested and analyzed to assist in determining which virus strains are present and the effectiveness of available vaccine(s). This information can also be used to help formulate effective antiviral drug treatment and prophylaxis protocols. This program is most effective in the early and late stages of each influenza season, but it is crucial to early detection of a pandemic influenza.
- 7.1.3 Detailed processes and procedures used by the DPHL to analyze these specimens are described in detail in the *Delaware Public Health Laboratory Standard Operating Guidelines*.
- 7.1.4 During the Pandemic Alert Period, specimens from suspected cases of human infection with novel influenza viruses should be sent for testing to DPHL.

7.2 Pandemic Period

- 7.2.1 During pandemic response operations, the SHOC is activated and oversight for laboratory assessment is provided by the Planning Section Chief and the Laboratory Liaison.
- 7.2.2 Detailed processes and procedures used by DPHL to analyze specimens during a pandemic influenza event are described in the *Delaware Public Health Laboratory Standard Operating Guidelines*.
- 7.2.3 The SHOC will work with the DPHL to ensure proper collection, transport, and testing of influenza specimens throughout all stages of a pandemic influenza.
- 7.2.4 Reference the *HHS Pandemic Influenza Plan*, Supplement 2 Laboratory Diagnostics, pages S2-1-30.

8.0 Medical Surge Capacity

DPH and Delaware Hospitals will plan ahead to address emergency staffing needs and increased demand for isolation wards, ICUs, assisted ventilation services, and consumable and durable medical supplies to estimate the potential impact of a pandemic on resources such as staffed beds, ventilators, and surge capacity resources. The following items should be assessed yearly for each hospital:

- Staffing needs
- Bed capacity
- Consumable and durable supplies
- Continuation of essential medical services

8.1 Inter-Pandemic and Pandemic Alert Periods

- 8.1.1 Inter-pandemic and pandemic alert medical surge capacity preparations for pandemic influenza events are the responsibility of individual hospitals. The Delaware Healthcare Association (DHA), working with the Public Health Preparedness Section (PHPS), provides support for medical surge planning.
- 8.1.2 PHPS publishes the *Acute Care Center Plan*, in cooperation with DHA, to describe how hospitals can activate additional facilities that provide a total of 400 additional beds for the treatment of stabilized patients throughout the state.
- 8.1.3 PHPS will assist the hospitals in medical surge capacity by:
 - 8.1.3.1 Providing the facilities and non-medical supplies to support operations;
 - 8.1.3.2 Purchasing and providing non-medical equipment needed to support operations; and

8.1.3.3 Reimbursing consumed supplies during exercises under existing agreements with individual hospitals.

8.1.4 Hospitals will work with PHPS and the Medical Reserve Corps program to identify, credential, and assign volunteers to perform appropriate tasks in the ACC(s).

8.2 Pandemic Period

8.2.1 During a pandemic influenza, the SHOC is activated and oversight for medical surge is provided by the Hospital/ACC Group Supervisor, under the general oversight of the Operations Section Chief.

8.2.2 During a pandemic, hospitals prepare to coordinate, through the SHOC, to transfer stable patients to long-term care facilities.

8.2.3 During a pandemic, hospitals prepare to expand medical surge capacity by canceling elective surgeries and other prudent measures to make appropriate bed spaces available.

8.2.4 As the number of people presenting for treatment increases, so too will the number of patients requiring hospitalization, especially for those in high risk groups.

8.2.5 SHOC will monitor hospital patient loads through the Facility Resources Emergency Database (FRED) system and coordinate with the hospitals, as required, to activate procedures to transfer stable patients to long-term care facilities.

8.2.6 Local hospitals will also coordinate with the SHOC to activate ACC(s) to further expand medical surge capabilities. Reference the *Acute Care Center Plan*.

9.0 Vaccine Management and Immunization

9.1 Inter-Pandemic and Pandemic Alert Periods

9.1.1 The Immunization Program Director provides oversight for forecasting vaccine requirements, procurement, and distribution to DPH clinics during inter-pandemic and pandemic alert periods.

9.1.2 The Immunization Branch will work with the CDC and manufacturers to ensure adequate supply of vaccines for the State of Delaware during inter-pandemic and pandemic alert.

9.1.3 When there is an adequate supply of effective vaccine(s), Northern Health Services (NHS) and Southern Health Services (SHS) operate DPH vaccination clinics throughout the state; however, the majority of people see their own healthcare provider to obtain vaccination. This arrangement is considered optimal because it makes the best use of public and private

resources to provide the best vaccine support for the greatest number of people.

- 9.1.4 Vaccines for distribution through DPH are received, stored, and managed by the DPH Pharmacy, located at the Delaware Hospital for the Chronically Ill (DHCI) in Smyrna. Vaccines are then ordered by Northern and Southern Health Services, as needed, to support vaccination clinics in their respective areas of the state.
- 9.1.5 *Vaccine Management Inventory and Distribution Plan (see Tab E4)* spreadsheet is an example spreadsheet that can be used for tracking vaccine stocks and ordering the preparation of vaccines to conduct DPH vaccination clinics. The Immunization Program Director will utilize this spreadsheet, with modifications required by the types of vaccine(s) available, during inter-pandemic periods.
- 9.1.6 Private healthcare providers forecast their needs for vaccine separately under the general oversight of DPH. Each provider makes separate arrangements to purchase, receive, store, and maintain their own stocks of vaccines. Vaccines are then used as determined by each provider.
- 9.1.7 The following vaccines are recommended for different age groups:
 - 9.1.7.1 Six months to 3 years, healthcare providers should use inactivated influenza vaccine. Inactivated influenza vaccine from Sanofi Pasteur (FluZone split-virus) is approved for use among persons aged \geq six months.
 - 9.1.7.2 Inactivated influenza vaccine from Chiron (Fluvirin) is labeled in the United States for use among persons aged \geq four years.
 - 9.1.7.3 Live, attenuated influenza vaccine from MedImmune (FluMist) is approved for use by healthy persons aged 5 to 49 years.
- 9.1.8 The following annual vaccination distribution scheduled should be followed:
 - 9.1.8.1 **Vaccinations before October.** To avoid missed opportunities for vaccination of person at high risk for serious complications, such persons should be offered vaccine beginning in September during routine healthcare visits or hospitalizations, if vaccine is available. In facilities housing older persons, vaccination before October should be avoided because antibody level can begin to decline.
 - 9.1.8.2 **Vaccination in October and November.** Advisory Committee on Immunization Practices (ACIP) recommends that vaccine providers focus their vaccination efforts in October and November on person age \geq 50 years at increased risk for influenza-related complications, children 6 to 23 months, and household contacts of persons at high risk.

- 9.1.8.3 **Vaccination in December and Later.** If substantial amounts of vaccine are left over and to improve vaccination coverage, influenza vaccine should continue to be offered in December and throughout the influenza season. In recent seasons influenza activity has not reached peak levels until late December through early March. Adults develop peak antibody protection against influenza infection two weeks after vaccination.

9.2 **Pandemic Period and Vaccine Shortage**

- 9.2.1 During pandemic response operations and periods when there is insufficient vaccine available to use normal procedures, the SHOC will be activated. Oversight for immunization activities will be provided by the Immunization Group Supervisor in SHOC Operations Section. This Immunization Group Supervisor advises the Medical Specialist in the Planning Section.
- 9.2.1.1 The ACIP will publish additional guidance regarding the prioritized uses of inactivated influenza vaccine to be implemented only during periods when there is a shortage of influenza vaccine.
- 9.2.2 The Planning Section Chief will work with the Immunization Group Supervisor to review the established vaccine priority group distribution protocols for vaccinating those individuals at the greatest risk from the disease. These priorities will be disseminated as mandatory guidelines for use in public and private vaccination clinics. Reference *Section 11.0 Vaccination Priority Groups* and *HHS Pandemic Influenza Plan, Supplement 6 Vaccine Distribution and use*, pages S2-1-30 and Appendix D NVAC/ACIP Recommendations for Prioritization of Pandemic Influenza Vaccine and NVAC Recommendations on Pandemic Antiviral Drug Use.
- 9.2.3 During pandemic response operations and periods of limited vaccine availability, vaccine management including private vaccine may be centralized at the DPH pharmacy under the general supervision of the Immunization Group Supervisor and the direct control of SHOC Operations Section.
- 9.2.3.1 In these circumstances SHOC will determine the quantity of vaccines that will be provided to hospitals, businesses, schools, healthcare facilities, and other entities.
- 9.2.3.2 Whether providing part or all of the vaccinations for the public, operation of DPH vaccination clinics during pandemic and vaccine shortage periods will be conducted according to *the Neighborhood Emergency Help Center (NEHC) Plan*.
- 9.2.4 Centralized management of vaccine would only be undertaken when it is clearly in the public interest as a means to provide the greatest benefit to the greatest number of people. The following situations would include, but not be limited to:

- 9.2.4.1 Situations in which or when a continuing pattern of provider failure to comply with voluntary or mandatory orders could logically be predicted to result in unnecessary spread or morbidity.
- 9.2.4.2 Ensuring vaccination of high-risk groups.
- 9.2.4.3 Private healthcare providers who turn their stocks of influenza vaccines over to the State of Delaware pursuant to an order. Providers will be reimbursed for the original purchase price after providing appropriate documentation.
- 9.2.5 The *Vaccine Management Inventory and Distribution Plan* (see **Tab E4**) spreadsheet can also be used for tracking and monitoring vaccine stocks for distribution to NEHC(s), hospitals, schools, healthcare clinics, businesses, and other entities during a pandemic period. The SHOC Planning Section will utilize this spreadsheet, with modifications required by the types of vaccine(s) available, during a pandemic period.

10.0 Vaccination Dispensing

10.1 Inter-Pandemic and Pandemic Alert Periods

- 10.1.1 NHS and SHS provide oversight for DPH vaccination dispensing in their respective areas during inter-pandemic and pandemic alert periods. Clinic managers request vaccines from the DPH Pharmacy and vaccinate patients, as needed. Non-DPH healthcare providers also provide vaccination services for their patients, but procure and store vaccines separately.
- 10.1.2 During the height of the flu season, demands for vaccination may stress the healthcare system, but operation of mass vaccination clinics may not be required.

10.2 Pandemic Period

- 10.2.1 Vaccination is the primary means of preventing influenza.
- 10.2.2 During a pandemic and periods when there is a shortage of effective vaccine(s), the number of people requesting vaccination will be significantly greater, especially for those in high risk groups.
- 10.2.3 During a pandemic period when vaccines or prophylactic medications, such as antiviral medications, are available and the demand for vaccinations is increasing significantly, the SHOC Incident Commander may direct activation of NEHC (s) to provide public vaccinations and/or dispense prophylactic medications. Activation, deployment, and operation of NEHC(s) are described in the *Neighborhood Emergency Help Center Plan*.
- 10.2.4 Under the direction of the SHOC, hospitals, healthcare providers, businesses, schools, and other entities may vaccinate their staff, students, and families and distribute antiviral medications, if available.

10.2.5 The SHOC will provide a suitable and appropriate vaccine schedule and guidelines.

11.0 Vaccination Priority Groups

- 11.1 Identifying priority groups for vaccination is important because vaccine supply will be less than demand. It will take 3 to 6 months before the first doses are produced. The U.S.-based vaccine production capacity is assumed to be 3 to 5 million doses per week and two doses per person are required for protection.
- 11.2 The State of Delaware's vaccine priority group distribution protocols were defined based on the federal Advisory Committee on Immunization Practices (ACIP) and the National Vaccine Advisory Committee (NVAC).
- 11.3 Because the attack rates of infection and the severity of disease caused by a pandemic strain cannot be predicted with certainty, SHOC may modify priority group protocols, if needed, to achieve defined objectives.
- 11.4 The federal government and state officials reserve the right to change priority group protocols based on epidemiological, medical, and essential circumstances.

11.5 Vaccine Priority Group Distribution Protocols

11.5.1 Tier I Subtier A

11.5.1.1 Medical workers and public workers who are involved in direct patient contact, other support services essential for direct patient care, and vaccinators.

- Critical hospital and medical personnel (doctors and nurses)
- Division of Public Health Emergency Response Workers (NEHC and SHOC personnel)
- Advance Life Support and Emergency Medical Services (EMS)

11.5.2 Tier I Subtier B

11.5.2.1 Persons ≥ 65 years with 1 or more influenza high-risk conditions.

11.5.2.2 Persons 6 months to 64 years with 2 or more influenza high-risk conditions.

11.5.2.3 Persons 6 months or older with history of hospitalization for pneumonia or influenza or other influenza high-risk condition in the past year.

11.5.3 Tier I Subtier C

11.5.3.1 Pregnant women.

11.5.3.2 Household contacts of severely immunocompromised persons who would not be vaccinated due to likely poor response to vaccine.

11.5.3.3 Household contacts of children < 6 months old.

11.5.4 Tier I Subtier D

11.5.4.1 Public health emergency response workers critical to pandemic response. (First one-third of public health workforce).

- Other Hospital and medical personnel
- State emergency operations center personnel
- Delaware State Police (Isolation and Quarantine Enforcement and Strategic National Stockpile (SNS) Security)
- Delaware National Guard (SNS Deployment and Security)

11.5.4.2 Key government leaders.

- Governor and Staff
- National Representatives
- Critical Judicial Staff (Isolation and Quarantine Enforcement)

11.5.5 Tier II Subtier A

11.5.5.1 Healthy 65 years and older.

11.5.5.2 6 months to 64 years with 1 high-risk condition. Reference 11.6 Influenza High Risk Categorization.

11.5.5.3 6-23 months old, healthy.

11.5.6 Tier II Subtier B

11.5.6.1 Other public health emergency responders (remaining two-thirds).

11.5.6.2 Public Safety workers.

- Local law enforcement
- Fire Service
- 911 Dispatchers and local EMAs
- Department of Corrections personnel
- Local city and town officials

11.5.6.3 Utility workers essential for maintenance of power, water, and sewage system functioning.

11.5.6.4 Transportation workers transporting fuel, water, food, and medical supplies as well as public ground transportation.

11.5.6.5 Telecommunications/IT for essential network operations and maintenance.

11.5.7 **Tier III**

11.5.7.1 Other Key government health decision-makers.

11.5.7.2 Funeral directors/embalmers.

11.5.8 **Tier IV**

11.5.8.1 Healthy persons 2-64 years not included in above categories.

11.5.9 Reference *HHS Pandemic Influenza Plan*, Appendix D: NVAC/ACIP Recommendations for Prioritization of Pandemic Influenza Vaccine and NVAC Recommendations on Pandemic Antiviral Drug Use, pages D10-D29.

11.6 **Influenza High Risk Categorization**

11.6.1 Persons categorized as being at high risk for influenza-related complications self-reported one or more of the following:

11.6.1.1 Persons aged ≥ 65 years;

11.6.1.2 Residents of nursing homes and other chronic-care facilities that house persons of any age who have chronic medical conditions;

11.6.1.3 Adults and children who have chronic disorders of the pulmonary or cardiovascular systems, including asthma (hypertension is not considered a high-risk condition);

11.6.1.4 Adults and children who have required regular medical follow-up or hospitalization during the preceding year because of chronic metabolic diseases (including diabetes mellitus), renal dysfunction, hemoglobinopathies, or immunosuppression (including immunosuppression caused by medications or by human immunodeficiency virus [HIV]);

11.6.1.5 Adults and children who have any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration;

11.6.1.6 Children and adolescents (aged 6 months--18 years) who are receiving long-term aspirin therapy and, therefore, might be at risk for experiencing Reye syndrome after influenza infection;

11.6.1.7 Women who will be pregnant during the influenza season; and

11.6.1.8 Children aged 6--23 months.

12.0 **Influenza Antiviral Medications**

12.1 Antiviral medications are effective treatment and prophylaxis for influenza. They are important adjunct to vaccination as a strategy for managing influenza.

- 12.2 Current supplies of antiviral medications are very limited and surge capacity is negligible. The State of Delaware will work with area hospitals and pharmaceutical companies to provide and manage an antiviral stockpile through the CDC's Shelf Life Extension Program (SLEP) and the Delaware In-state Stockpile (ISS).
- 12.3 The options for antiviral medications depend on the size of the available antiviral supply, the size of the priority groups targeted for antiviral use, and the specific goals to be achieved in the pandemic response.
- 12.4 The State of Delaware's use of antiviral medications will be for treatment first and then prophylaxis, if available. The strategy of treatment first was derived by the limited supply of antiviral medication. Treatment requires a total of 10 capsules (1 course) and Prophylaxis is assumed to require 40 capsules (4 courses) though more may be needed if community outbreaks last for a longer period.
- 12.5 Prophylaxis is more likely to prevent serious complications from influenza than treatment because prophylaxis prevents cases of influenza from developing. However, use of antiviral medications for prophylaxis purposes will require a much larger drug supply and would be cost prohibitive. Vaccination should be the primary method of prophylaxis.
- 12.6 Four antiviral agents are currently approved by the U.S. Food and Drug administration for preventing or treating influenza as shown in Table 2--"Antiviral Medication for Prophylaxis and Treatment of Influenza."

Table 2-Antiviral Medication for Treatment and Prophylaxis of Influenza

Antiviral Medication	Trade Name	Flu Type	Use	Age Restrictions
Amantadine	Symmetrel [®]	A	Prophylaxis/Treatment	≥ 1 year
Rimantadine	Flumadine [®]	A	Prophylaxis/Treatment	Adults only for treatment ≥ 1 year for prophylaxis
Zanamivir	Relenza [®]	A and B	Treatment Only	≥ 7 years
Oseltamivir	Tamiflu [®]	A and B	Prophylaxis/Treatment	≥ 1 year for Treatment ≥ 13 years for prophylaxis

- 12.1.1.4 Amantadine and Rimantadine are effective against Type A virus strains only. Amantadine is approved for treatment of persons one year of age and older. Rimantadine is only approved for treatment of adults.
- If used prophylactically and during an outbreak or pandemic, both medications are 70% to 90% effective in preventing disease.
 - Some people who take these medications for prophylaxis will develop sub-clinical infections and will develop increased resistance to that virus strain.
- 12.1.1.5 Zanamivir and Oseltamivir are neuraminidase inhibitor agents that are effective against influenza A and B type strains. Zanamivir is not approved by the FDA for prophylaxis, but Oseltamivir is. Both medications can be used to treat symptoms.

12.1.2 Inter-Pandemic and Pandemic Alert Periods

- 12.1.2.4 During inter-pandemic and pandemic alert periods healthcare providers may prescribe antiviral medications for both prophylaxis and treatment.
- Prophylaxis will be more appropriate for isolated populations (i.e. long term care facilities) when providers have a higher degree of certainty that at risk patients will not be exposed to people who have not received prophylaxis.
 - Prophylaxis is less desirable when patients are in groups that have extensive interactions with the public and exposure to people who have not received prophylaxis cannot be confirmed.
 - The amantadane derivatives (amantadine and rimantadine) are best suited for prophylaxis (preventive care) because of the high potential for viral resistance to emerge during treatment, the potential supply, and cost.
 - Neuraminidase inhibitors (oseltamivir and zanamivir) should be used for therapy because of the potential for viral resistance when adamantanes are used for therapy.

12.1.3 Pandemic Periods

- 12.1.3.4 During a pandemic influenza, the primary goal of antiviral treatment and prophylaxis would be to decrease adverse health impact (morbidity and mortality) and reduce social and economic disruption.
- 12.1.3.5 The relative importance of antiviral medication uses is likely to be greatest early in the pandemic when vaccines are not available or their supply is limited.

- 12.1.3.6 Antiviral medication use should not be considered as a strategy for altering the overall course of a pandemic.
- 12.1.3.7 There is a theoretical ability of intensive treatment and prophylaxis, in conjunction with containment measure such as quarantine and isolation, snow days, and closing of public venues to decrease the spread of a novel influenza strain early in the pandemic.
- 12.1.3.8 The SHOC will implement priority group distribution protocols and strategies for antiviral medication use, which is based on HHS guidelines and recommendations.
- 12.1.3.9 The federal government and state officials reserve the right to change priority group protocols based on epidemiological, medical, and essential circumstances.
- 12.1.3.10 **Antiviral Medication Priority Group Distribution Protocols:**

Table 3-Antiviral Medication Priority Group Distribution Protocols

	Group	Strategy	Rationale
1	Patients admitted to hospital	Treatment	Consistent with medical practice and ethics to treat those with serious illness and who are most likely to die.
2	Healthcare workers (HCW) with direct patient contact and emergency medical service (EMS) providers.	Treatment	HCW are required for quality medical care. There is little surge capacity among healthcare sector personnel to meet increased demand.
3	Highest risk outpatients-immunocompromised persons and pregnant women.	Treatment	Groups at greatest risk of hospitalization and death; immunocompromised cannot be protected by vaccination.
4	Pandemic health responders (public health-SHOC and NEHC personnel, vaccinators, public safety, and government decision makers).	Treatment	Groups are critical for an effective public health response.
5	Increased risk outpatients-young children 12-23 months old, persons ≥ 65 years old, and person with underlying medical conditions cover in section 11.6.	Treatment	Groups are at high risk for hospitalization and death.
6	Outbreak response in nursing homes and other residential settings.	Prophylaxis	Treatment of patients and prophylaxis of contacts is effective in stopping outbreaks.
7	HCW in emergency departments, intensive care units, dialysis centers, EMS providers, and NEHC and ACC personnel, if applicable.	Prophylaxis	These groups are most critical to an effective healthcare response and have limited surge capacity. Prophylaxis will best prevent absenteeism.
8	Pandemic societal responders (critical infrastructure as described in section 11.5.6)	Treatment	Infrastructure groups that have impact on maintaining health, implementing pandemic response, and maintaining societal functions.
9	Other outpatients	Treatment	Includes others who develop influenza and do not fall within the above groups.
10	Highest risk outpatients	Prophylaxis	Prevent illness in the highest risk groups for hospitalization and death. Reference section 11.6.
11	Other HCW with direct patient contact.	Prophylaxis	Prevention would best reduce absenteeism and preserve optimal function.

13.0 Infection Control

The primary strategies for preventing a pandemic influenza are the same as those for seasonal influenza; vaccination, early detection and treatment with antiviral medications, and use of **infection control measures** to prevent transmission. Families, businesses, healthcare professionals, and community organizations should use the following websites and checklist (<http://www.pandemicflu.gov/plan/checklists.html> and <http://www.pandemicflu.gov/health/>) to aid preparation for a pandemic in a coordinated and consistent manner across all segments of society. The websites provide detailed infection control measures to implement in daily routines and during a pandemic and a planning checklist to assist in preparation of a pandemic.

13.1 Inter-Pandemic and Pandemic Alert Periods

- 13.1.1 Even non-pandemic influenza viruses are spread easily from person to person, primarily through inhalation of small aerosolized particles and larger droplets. In general, people are contagious one day before symptoms manifest themselves and five days after onset of the illness. However, children can be infectious for longer periods. The main options for controlling influenza include prophylactic immunization and the use of antiviral medications, as described above.
- 13.1.2 Additional measures and precautions can be used during inter-pandemic and pandemic alert periods and annual influenza seasons to lessen the probability of spreading influenza viruses.
- 13.1.3 The following measures are recommend for HCW:
 - 13.1.3.4 Hand washing
 - 13.1.3.5 Disposable gloves and gowns
 - 13.1.3.6 Masks (Disposable N-95 masks)
 - 13.1.3.7 Eye protection (goggles or face shield)
- 13.1.4 The following measures will be communicated to the public during inter-pandemic and pandemic alert periods and annual influenza seasons to lessen the probability of spreading influenza viruses.
 - 13.1.4.4 Avoid close contact.
 - 13.1.4.5 Stay home when you are sick.
 - 13.1.4.6 Cover your mouth and nose when coughing or sneezing.
 - 13.1.4.7 Clean your hands.
 - 13.1.4.8 Avoid touching your eyes, nose or mouth.

- 13.1.5 DPH will provide updated information prior to each influenza season on the prevention and control of influenza, with particular emphasis on infection control.

13.2 Pandemic Period

- 13.2.1 Infection control measures that are successful during normal, inter-pandemic influenza season are even more important in preventing the spread of a pandemic and will be re-emphasized in risk communication messages to appropriate audiences.
- 13.2.2 Increased consideration should be given to cohorting ill patients, since private rooms are not likely to be available for influenza patients during a pandemic. ACC(s) may be opened for this purpose. Movement and transport of patients should be limited, if possible.
- 13.2.3 SHOC Public Affairs Officer under the guidance of the SHOC Incident Commander and/or the State Joint Information Center (JIC) will provide statewide (media and website) updated information on prevention and control of the pandemic influenza, with particular emphasis on infection control.
- 13.2.4 The public health authority, public safety authority, and SHOC will address other infection containment measures such as:
 - 13.2.4.4 School closures
 - 13.2.4.5 Snow days
 - 13.2.4.6 Travel restrictions
 - 13.2.4.7 Shelter-in-place
 - 13.2.4.8 Isolation and Quarantine
- 13.2.5 Reference *HHS Pandemic Influenza Plan*, Supplement 4 Infection Control and Supplement 8 Community Disease Control and Prevention, and *Delaware Contagious Disease Containment Measures Plan*.

14.0 Health and Risk Communications

Because of anticipated shortages of both vaccine and antiviral medications, planning around messages informing the population about availability and addressing the rationale for priority groups and measures to be taken until such are available will be critical.

Other important topics include basic information about influenza, information about the course of the pandemic, information about which symptoms should prompt seeking medical assistance and which symptoms should be managed at home, infection control measures, information about school and business closures, suspension of public meetings, and information about travel restrictions and quarantine laws.

14.1 Inter-Pandemic and Pandemic Alert Periods

- 14.1.1 The Chief of Health and Risk Communications from DPH provides oversight for risk communications activities during inter-pandemic periods.
- 14.1.2 Health and risk communication activities can play a key role in preventing the spread of influenza, whether it is a pandemic virus strain or not. These activities are described in the *Crisis and Risk Communication Plan*. They include, but are not limited to:
 - 14.1.2.4 Providing annual information to healthcare providers and the general public about infection control measures such as hand washing, stay at home when sick, use of gloves and masks, and bed management.
 - 14.1.2.5 Monitoring CDC and WHO bulletins and alerts about influenza-related alerts, clinical findings associated with new virus strains, etc.
 - 14.1.2.6 Distributing timely and appropriately tailored information to specific audiences such as DPH staff, healthcare providers, and members of the public. Whenever possible, multiple media sources will be used to maximize total coverage.
 - 14.1.2.7 Preparing fact sheets and news releases related to vaccination clinics and other measures for preventing disease, limiting the spread of disease, and orders issued by the State Health Officer (SHO).
 - 14.1.2.8 Prepare the general public for the possibility of quarantine and isolation.
 - 14.1.2.9 Disseminating information through the Delaware Health Alert Network (DHAN).
 - 14.1.2.10 Communicating information about the disease to groups at higher risk for developing complications from influenza.
 - 14.1.2.11 Managing media requests for related information.

14.2 Pandemic Period

- 14.2.1 During pandemic response operations the SHOC is activated, and the Public Affairs Officer provides oversight for risk communications as described in the *Crisis and Risk Communication Plan* and the *State Health Operations Center Plan*.
- 14.2.2 If the State Joint Information Center (JIC) is activated, risk communications for the state will come through the JIC.
- 14.2.3 In addition to inter-pandemic and pandemic alert risk communication activities stated above, the following pandemic activities will also be initiated:

- 14.2.3.4 Update and distribution of timely and appropriately tailored information to specific audiences such as emergency responders, healthcare providers, and members of the public. Whenever possible, multiple media sources will be used to maximize total coverage.
- 14.2.3.5 Update and preparation of fact sheets and news releases related to vaccination clinics, NEHCs, ACCs, and other measures for preventing disease, limiting the spread of disease, and orders issued by the SHOC Incident Commander, and/or Emergency Operations Center (EOC).
- 14.2.3.6 Dissemination of updated information through the Delaware Health Alert Network (DHAN).
- 14.2.3.7 Communication of updated information about the disease to groups at higher risk for developing complications from influenza.
- 14.2.3.8 Management of media requests for related information through coordination of media activities with the SHOC Public Affairs Officer and/or JIC.
- 14.2.3.9 Provision of information about travel advisories and other precautions advised by the CDC, the SHOC, and/or the EOC.

15.0 Command and Control

15.1 Inter-Pandemic and Pandemic Alert Periods

- 15.1.1 Existing Division of Public Health command and control system structure will be applied to inter-pandemic to pandemic alert periods unless conditions warrant DPH officials and the state health officer to activate the SHOC at levels I through III. The following conditions warrant early activation of the SHOC:
 - 15.1.1.4 Knowledge of vaccine and antiviral shortages;
 - 15.1.1.5 Rate of extremely high mortality;
 - 15.1.1.6 Resistance of influenza virus to vaccine and antiviral medications; and
 - 15.1.1.7 Other criteria specified in the *State Health Operations Center (SHOC) Plan*.

15.2 Pandemic Period

- 15.2.1 The Governor of Delaware may declare a State of Emergency in order to provide effective command and control for response to a pandemic influenza.
- 15.2.2 The Delaware Emergency Management Agency (DEMA) will act as the lead agency for the Department of Safety and Homeland Security to coordinate

these operations. DEMA will coordinate operations through the Delaware Emergency Operations Center (EOC) as described in the *Delaware Emergency Operations Plan and Emergency Support Function 8-Public Health and Medical Services* to that plan.

- 15.2.3 The Division of Public Health's (DPH) response to a pandemic influenza in Delaware will be coordinated and controlled from the State Health Operations Center (SHOC). Operations of the State Health Operations Center (SHOC) are described in detail in the *State Health Operations Center Plan*.

15.3 Reporting

15.3.1 Inter-Pandemic and Pandemic Alert Periods

15.3.1.4 The Division of Public Health reports influenza activity weekly to the CDC via the Public Health Laboratory Information System by noon each Tuesday (September through May).

- The report will characterize activities as no activity, sporadic, local, regional, or widespread.
- The report will also include the number of severe respiratory illness and/or febrile related illnesses in acute care facilities.
- The Sentinel Provider Program Manager will provide weekly influenza reports to the CDC via the internet.
- The State Epidemiologist will conduct weekly analyses of overall influenza activity levels in the state and report this data the DPH Administrators and Section Chiefs.
- Hospital emergency departments, long-term care facilities, and physicians' offices will report to the State Epidemiologist not later than noon on Monday, on a by-patient-name basis, any unusual deaths due to respiratory infection.

15.3.2 Pandemic Period

15.3.2.4 During a pandemic, the SHOC is activated and oversight for reporting is provided by the Planning Section.

15.3.2.5 The Incident Commander and the Planning Section Chief will decide the reporting procedures and format.

16.0 Plan Development and Maintenance

- 16.1 The Division of Public Health, Public Health Preparedness Section, is responsible for development and maintenance of this plan.
- 16.2 The Delaware Pandemic Preparedness Coordination Committee is made up of DPH administrators, other state agencies, partners (i.e. Dover Air Force Base, funeral directors, business, local and county governments, etc), and other state working

groups and committees. The committee will advise PHPS on planning input, development, and maintenance of the plan. Reference committee organization chart below.

16.3 PHPS will coordinate annual review and update of this plan.

16.4 PHPS will monitor completed activities by updating a quarterly checklist from HHS. The HHS Checklist will be kept in a separate file by PHPS.

Figure 1 Delaware Pandemic Preparedness Coordination Committee



17.0 Training and Exercises

- 17.1 The Public Health Preparedness Section (PHPS) is responsible to coordinate training on this plan and implementing guidance for DPH employees and partner organizations.
- 17.2 Required training will be offered annually for newly assigned personnel.
- 17.3 Applicable sections of training programs will be offered whenever there are substantive changes to the plan or key guidance documents.
- 17.4 This plan will be exercised annually. This may be accomplished through a tabletop, functional, or full-scale exercise.

18.0 Evaluation and Quality Improvement

- 18.1 PHPS will assure that an After Action Report (AAR) is prepared to document findings from each exercise and actual implementation of this plan.
- 18.2 PHPS will review applicable AAR(s) and other documents in order to identify opportunities to improve the plan.
- 18.3 Quality assurance and improvement activities including reviews of policy, procedures, protocols and processes are incorporated as part of the annual plan review.

Tab A Glossary

Acute Care Center (ACC). A facility operated by area hospitals in conjunction with the Division of Public Health. An ACC is established to care for patients who are not ill enough to be admitted to a hospital but not well enough to stay at home. An ACC remains operational until the local healthcare system recovers enough to absorb the extra patient load. The ACC is designed, organized, equipped, and staffed specifically to provide inpatient medical services for those affected by the disaster or event.

Closed Institutions. Facilities which provide long term care for the special needs population such as the chronically ill and the elderly.

Defined Populations. Specific priority group and/or identified priority group of citizens who are at higher risk of contracting influenza. The CDC and state officials are responsible for defining priority groups.

Investigational Response Team (IRT). IRTs investigate cases of illnesses or diseases to determine if the disease is spreading, what is the source of the disease, how it is transmitted, and is it spreading within the community. IRTs consist of an Epidemiologist (EPI), a Public Health Nurse (PHN), and an Environmental Health Specialist (EHS).

Joint Information Center (JIC). A central point of contact for all news media when a large-scale or multi-agency disaster response occurs. Public information officials who represent all participating federal, state, and local agencies provide information to the media in a coordinated and consistent manner.

Neighborhood Emergency Help Center (NEHC). A facility operated by the Division of Public Health in cooperation with other agencies to provide prophylactic medications, vaccines, medical triage and evacuation, and serves as a gateway into the healthcare system in the event of a widespread dissemination of an agent or disease and/or in a public health emergency (i.e. smallpox, pandemic influenza, anthrax, etc.).

Pandemic Influenza Working Group. A working group of DPH officials who are responsible for planning, guidance, development, and maintenance of the Pandemic Influenza Plan.

Pandemic Influenza Steering Group. A group of DPH officials including the state health officer, DPH administrators, and SHOC management who are responsible for plan approval, training and exercises, and plan implementation.

Snow Days. Snow days are utilized by public health officials as a containment measure in the event of an infectious disease outbreak and/or biological agent outbreak (i.e. pandemic influenza). Snow days are utilized to shelter-in-place communities in an effort to prevent further spread of a disease or agent. Individuals will be asked to remain in the homes for a determined period of time and limit their public activities.

State Health Operations Center (SHOC). The State Health Operations Center (SHOC) provides command and control for all public health response and recovery functions in an emergency or disaster.

Strategic National Stockpile (SNS). A national repository of antibiotics, chemical antidotes, antitoxins, life-support medications, intravenous-administration and airway-maintenance supplies, and medical or surgical materiel for use in a declared biological or chemical terrorism event or other major public health emergency.

Tab B References

- 1.0 Acute Care Center Plan, Delaware Health Care Association.
- 2.0 Crisis and Risk Communication Plan, Division of Public Health.
- 3.0 Delaware Emergency Operations Plan (DEOP), Delaware Emergency Management Agency.
- 4.0 Delaware Contagious Disease Containment Measures Plan.
- 5.0 Delaware Public Health Laboratory Standard Operating Guidelines.
- 6.0 DPH Epidemiological Surveillance Standard Operating Guidelines.
- 7.0 DPH Investigative Response Team Standard Operating Guidelines
- 8.0 Emergency Support Function (ESF) 8, Public Health and Medical Services, Delaware Emergency Management Agency.
- 9.0 Health Communications Standard Operating Guidelines, Division of Public Health.
- 10.0 HHS Pandemic Influenza Plan, US Department Health and Human Services.
- 11.0 Prevention and Control of Influenza, “*Recommendations of the Advisory Committee on Immunization Practices (ACIP)*”. MMWR, “Recommendations and Reports”, July 13, 2005 / 54(Early Release); 1-40.
- 12.0 Multiple Fatality Management Plan, Office of the Chief Medical Examiner.
- 13.0 National Strategy for Pandemic Influenza Implementation Plan, Homeland Security Council, May 2006.
- 14.0 Neighborhood Emergency Help Center Plan, Division of Public Health.
- 15.0 Pandemic Influenza Plan. The Role of World Health Organization and Guidelines for National and Regional Planning, dated April 1999.
- 16.0 Pandemic Influenza Preparedness and Response Plan, Department of Health and Human Services, dated August 2004.
- 17.0 State Health Operation Center (SHOC) Plan.
- 18.0 Strategic National Stockpile (SNS) Plan.
- 19.0 U.S. Department of Homeland Security publication *National Incident Management System* (NIMS), dated March 1, 2004.
- 20.0 WHO Global Influenza Preparedness Plan, “*Epidemic Alert & Response*”. World Health Organization, dated 2005.
- 21.0 WHO Consultation on Priority Public Health Interventions Before and During an Influenza Pandemic, “*Epidemic Alert & Response*”. World Health Organization, dated March 16, 2004.

Tab C World Health Organization (WHO) Phases and Periods and Appropriate SHOC Activation.

PHASE	DESCRIPTION	SHOC LEVEL
1 – Inter-pandemic Period	<p>No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection or disease may or may not be present in animals. If present in animals, the risk of human infections or disease is considered to be low.</p> <p>Rationale. It is likely that influenza subtypes that have caused human infection and/or disease will always be present in wild birds or other animal species. Lack of recognized animal or human infections does not mean that no action is needed. Preparedness requires planning and action in the beginning.</p>	Not Activated. Normal command and controls performed where State Epidemiologist and Delaware Public Health Laboratory Director provide and participate in surveillance actions. Sends regular updates to DPH Section Chiefs and Administrators and SHOC Management Structure.
2 – Inter-pandemic Period	<p>No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.</p> <p>Rationale. The presence of animal infection caused by a virus of known human pathogenicity may pose a substantial risk to human health and justify public health measures to protect persons at risk.</p>	Not Activated. Normal command and controls performed where State Epidemiologist and Delaware Public Health Laboratory Director provide and participate in surveillance actions. Sends regular updates to DPH Section Chiefs and Administrators and SHOC Management Structure.

PHASE	DESCRIPTION	SHOC LEVEL
3 – Pandemic Alert Period	<p>Human infections(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.</p> <p>Rationale. The occurrence of cases of human disease increase the chance that the virus may adopt or re-assort to become transmissible from human to human, especially if coinciding with a seasonal outbreak of influenza. Measures are needed to detect and prevent spread of disease. Rare instances of transmissions to a close contact – for example, in a household or health-care setting – may occur, but do not alter the main attribute of this phase, i.e. that the virus is essentially not transmissible from human to human.</p>	<p>Under normal conditions SHOC is not activated. Command and controls performed where State Epidemiologist and Delaware Public Health Laboratory Director provide and participate in surveillance actions. Sends regular updates to DPH Section Chiefs and Administrators and SHOC Management Structure.</p> <p>SHOC may be activated at Level I or II if a vaccine shortage exist.</p>
4 – Pandemic Alert Period	<p>Small cluster(s) with limited human-to-human transmissions but spread is highly localized, suggesting that the virus is not well adapted to humans.</p> <p>Rationale. Virus has increased human-to-human transmissibility but is not well adapted to humans and remains highly localized, so that its spread may possible be delayed or contained.</p>	<p>Under normal conditions SHOC is not activated. Command and controls performed where State Epidemiologist and Delaware Public Health Laboratory Director provide and participate in surveillance actions. Sends regular updates to DPH Section Chiefs and Administrators and SHOC Management Structure.</p> <p>SHOC may be activated at Level I or II if a vaccine shortage exist.</p>

PHASE	DESCRIPTION	SHOC LEVEL
5 – Pandemic Alert Period	<p>Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not be yet fully transmissible (substantial pandemic risk).</p> <p>Rationale. Virus is more adapted to humans, and therefore more easily transmissible among humans. It spreads in larger clusters, but spread is localized. This is likely to be the last chance for massive coordinated global intervention, targeted to one or more foci, to delay or contain spread. In the view of possible delays in documenting spread of infection during pandemic phase 4, it is anticipated that there would be a low threshold for progressing to phase 5.</p>	<p>Under normal conditions SHOC is not activated. Command and controls performed where State Epidemiologist and Delaware Public Health Laboratory Director provide and participate in surveillance actions.</p> <p>SHOC may be activated at Level II or III if conditions warrant Public Health officials to activate the SHOC. The following conditions warrant early activation of the SHOC: (1) Knowledge of vaccine and antiviral shortages; (2) Rate of mortality is extremely high; and (3) The influenza virus is resistant to vaccine and antiviral medications.</p>
6 – Pandemic Period	<p>Increased and sustained transmission in the general population.</p> <p>Rationale. Major change in global surveillance and response strategy, since pandemic risk is imminent for all countries. The national response is determined primarily by the disease impact within the county.</p>	<p>SHOC Level III (Full Activation) – State of Emergency</p> <p>The SHOC will coordinate efforts with DEMA and other healthcare partners to provide planning and response efforts to the Pandemic influenza.</p>

Note: This table does not give every conceivable scenario. It is the judgment and decision of the Director of DPH and Administrators to activate the SHOC and brief the Secretary of Delaware Health and Social Services (DHSS)

Tab D Acronyms

- 1.0 **ACC** - Acute Care Center
- 2.0 **ACIP** - Advisory Committee on Immunization Practices
- 3.0 **ACLF** - Adult Congregate Living Facilities
- 4.0 **ARC** - American Red Cross
- 5.0 **CDC** - Centers for Disease Control and Prevention
- 6.0 **CHC** - Community Health Centers
- 7.0 **CISM** - Critical Incident Stress Management
- 8.0 **CRI** - Cities Readiness Initiative
- 9.0 **CTS** - Casualty Transport System
- 10.0 **DAFB** - Dover Air Force Base
- 11.0 **DEMA** - Delaware Emergency Management Agency
- 12.0 **DERSS** - Delaware Electronic Reporting and Surveillance System
- 13.0 **DHAN** - Delaware Health Alert Network
- 14.0 **DHCI** - Delaware Hospital for the Chronically Ill
- 15.0 **DNREC** - Department of Natural Resources and Environmental Control
- 16.0 **DPHL** - Delaware Public Health Laboratory
- 17.0 **DPR** - Division of Professional Regulation
- 18.0 **DSHS** - Department of Safety and Homeland Security
- 19.0 **DSP** - Delaware State Police
- 20.0 **EIP** - Emerging Infections Program
- 21.0 **EMAC** - Emergency Medical Assistance Compact
- 22.0 **EMS** - Emergency Medical Services
- 23.0 **EMT** - Emergency Medical Technician
- 24.0 **EOC** - Emergency Operations Center
- 25.0 **FDA** - Food and Drug Administration
- 26.0 **FQHC** - Federally Qualified Health Center
- 27.0 **FRED** - Facility Resources Emergency Database
- 28.0 **HCW** - Healthcare workers
- 29.0 **HHS** - US Department of Health and Human Services
- 30.0 **HRSA** - Health Resources and Services Administration

- 31.0 **ILI** - Influenza Like Illness
- 32.0 **ILS** - Influenza Like Symptoms
- 33.0 **IND** - Investigational New Drug
- 34.0 **JAS** - Job Action Sheet
- 35.0 **JIC** – Joint Information Center
- 36.0 **LRN** - Laboratory Response Network
- 37.0 **NEHC** - Neighborhood Emergency Help Center
- 38.0 **NREVSS** - National Respiratory and Enteric Virus Surveillance System
- 39.0 **NVAC** - National Vaccine Advisory Committee
- 40.0 **NVSN** - New Vaccines Surveillance Network
- 41.0 **OCME** - Office of the Chief Medical Examiner
- 42.0 **PHPS** - Public Health Preparedness Section
- 43.0 **PPE** - Personal Protective Equipment
- 44.0 **RSS** - Receiving, Staging, and Storing
- 45.0 **SHO** - State Health Officer
- 46.0 **SHOC** - State Health Operations Center
- 47.0 **SNS** - Strategic National Stockpile
- 48.0 **WHO** - World Health Organization

Tab E Forms

Forms
Tab E1 – Vaccine Administration Record I
Tab E2 – Vaccine Administration Record II
Tab E3 – Vaccine Administration Record III
Tab E4 – Vaccine Management Inventory and Distribution Plan

Tab E1–Vaccine Administration Record


Vaccine Administration Record I <small>Delaware Division of Public Health Division of Public Health</small>							
Date _____							
Name _____		Age _____		Birthdate ____/____/____			
<small>Last</small>	<small>First</small>	<small>Middle</small>					
Address _____				Sex <input type="checkbox"/> F <input type="checkbox"/> M <input type="checkbox"/> Race _____			
City/Town _____				Zip Code _____			
Medical History:							
Have you or your child* ever had a serious allergic reaction to previous doses of influenza or pneumococcal vaccine?				<input type="checkbox"/> yes <input type="checkbox"/> no _____			
Have you or your child* ever had a serious allergic reaction to any medicines, foods (esp. eggs), or any other substance?				<input type="checkbox"/> yes <input type="checkbox"/> no _____			
Are you pregnant or do you plan to be pregnant by February 2005?				<input type="checkbox"/> yes <input type="checkbox"/> no _____			
Do you or your child* have any chronic diseases of the lungs, heart, kidneys, bloodstream or other vital organs, including asthma or diabetes?				<input type="checkbox"/> yes <input type="checkbox"/> no _____			
Are you 65 years of age or older?				<input type="checkbox"/> yes <input type="checkbox"/> no _____			
Is your child* on chronic aspirin therapy?				<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a			
Are you or your child* in good health?				<input type="checkbox"/> yes <input type="checkbox"/> no _____			
*Child must be 9 years of age or older.							
A signature and check mark next to the vaccine type means that I have been provided a copy of the appropriate Centers for Disease Control and Prevention Vaccine Information Statement(s) and have read, or have had explained to me, information about the disease(s) and the vaccine(s). I have had a chance to ask questions that were answered to my satisfaction. I understand the risks and benefits as set forth in the statement(s) received; and I ask that the vaccine(s) as checked below be given to me.							
Patient/ Parent/Guardian _____							
DO NOT WRITE BELOW THIS LINE							
Vaccine(s) given:							
Check	Indicate needle size if appropriate	Date Given month/day	Site (Circle One)	Vaccine Manufacturer	Vaccine Lot Number	VTS Date	Nurse/Significant Initial
<input type="checkbox"/>	Influenza (IM) 5/8", 1", 1.5", N		RA LA				
<input type="checkbox"/>	Pneumococcal (IM) 5/8", 1", 1.5", N		RA LA				
CDC, PHS-05-20040810 Revised 11/2/04							

Tab E2-Vaccine Administration Record II

Vaccine Administration Record II <div style="display: inline-block; vertical-align: middle; text-align: left; margin-left: 10px;"> <small>Division of Public Health and Disease Prevention Division of Public Health</small> </div>							
Date _____							
Name _____ Age _____ Birthdate ____/____/____ <div style="display: flex; justify-content: space-around; font-size: small;"> Last First Middle </div>							
Address _____ Sex <input type="checkbox"/> F <input type="checkbox"/> M <input type="checkbox"/> Race _____							
City/Town _____ Zip Code _____							
Medical History:							
Have you ever had a serious allergic reaction to previous doses of influenza or pneumococcal vaccine? <input type="checkbox"/> yes <input type="checkbox"/> no _____							
Have you ever had a serious allergic reaction to any medicines, foods or any other substance? <input type="checkbox"/> yes <input type="checkbox"/> no _____							
Are you pregnant? <input type="checkbox"/> yes <input type="checkbox"/> no _____							
Do you have any chronic diseases of the lungs, heart, kidneys, bloodstream or other vital organs, including asthma or diabetes? <input type="checkbox"/> yes <input type="checkbox"/> no _____							
<p>A signature and check mark next to the vaccine type means that I have been provided a copy of the appropriate Centers for Disease Control and Prevention Vaccine Information Statement(s) and have read, or have had explained to me, information about the disease(s) and the vaccine(s). I have had a chance to ask questions that were answered to my satisfaction. I understand the risks and benefits as set forth in the statement(s) received; and I ask that the vaccine(s) as checked below be given to me.</p> <p style="text-align: center;">Patient/ Parent/Guardian _____</p>							
DO NOT WRITE BELOW THIS LINE							
Vaccine(s) given:							
Check	Indicate needle size if appropriate	Date Given (month/day)	Site (Circle One)	Vaccine Manufacturer	Vaccine Lot Number	VTS Date	Nurse/Signator Initial
	Influenza (IM) 5/8", 1", 1.5", N		RA LA				
	Pneumococcal (IM) 5/8", 1", 1.5", N		RA LA				

DOC. 995-05-20040210
Revised 10/22

Tab E3-Vaccine Administration Record III

Vaccine Administration Record III

Division of Public Health
State of Delaware

Date _____

Name _____ Age _____ Birthdate ____/____/____
Last First Mi.

Address _____ Sex F ☐ M ☐ Race _____

City/Town _____ Zip Code _____

Medical History:

Is your child 6 - 23 months of age? ☐ yes ☐ no _____

Has your child ever had a serious allergic reaction to previous doses of influenza or pneumococcal vaccine? ☐ yes ☐ no _____

Has your child ever had a serious allergic reaction to any medicines, foods (esp. eggs), or any other substance? ☐ yes ☐ no _____

Is your child currently ill or running a fever? ☐ yes ☐ no _____

Does your child have any chronic diseases of the lungs, heart, kidneys, bloodstream or other vital organs, including asthma or diabetes? ☐ yes ☐ no _____

Is your child on chronic aspirin therapy? ☐ yes ☐ no _____

Adolescents: Are you pregnant or do you plan to be pregnant by February 2005? ☐ yes ☐ no _____

A signature and check mark next to the vaccine type means that I have been provided a copy of the appropriate Centers for Disease Control and Prevention Vaccine Information Statement(s) and have read, or have had explained to me, information about the disease(s) and the vaccine(s). I have had a chance to ask questions that were answered to my satisfaction. I understand the risks and benefits as set forth in the statement(s) received; and I ask that the vaccine(s) as checked below be given to me.

Patient/ Parent/Guardian _____

DO NOT WRITE BELOW THIS LINE

Vaccine(s) given:

Check	Indicate needle size if appropriate	Date Given month	Site (Circle One)	Vaccine Manufacturer	Vaccine Lot Number	VIS Date	Nurse/Significant Initial
	Influenza (IM) 5/8", 1", 1.5", N		RL LL RA LA				
	Influenza, P-Free (IM) 5/8", 1", 1.5", N		RL LL RA LA				

CDC, PHS-05-20040210 Revised 11/2004

Tab E4-Example Vaccine Inventory and Distribution Plan

Vaccine Inventory and Distribution Plan (Date)										
1. Current Inventory of Vaccines by Area, Location, Program, and Type										
Area/Source	Location	Program	Type	Lot Number	Number of Vials	Number Pre-filled Syringes	Doses Per Vial	Total Doses in Full Vials	Single Doses	Total Doses
NHS	Limestone		Normal	U1521AB	71		10	710	0	710
NHS	Limestone		Normal	U1417AA	19		10	190	0	190
NHS	Limestone		Normal	U1379AA	1		10	10	0	10
NHS	Limestone		Normal	U1442AA	1		10	10	0	10
NHS	Limestone		Normal	U1499AA	30		10	300	0	300
NHS	Limestone		Preservative Free	U1472AA	29		10	290	5	295
NHS	Limestone		Preservative Free	U1436AA	16		10	160	1	161
NHS	Provider A		Normal	U1499AA	30		10	300	0	300
NHS	Provider B		Normal	U1443AA	30		10	300	0	300
NHS	Provider C		Normal	1490AA	6		10	60	0	60
SHS	Georgetown	VFC	Preservative Free			27	10	0	0	27
SHS	Georgetown	VFC			7		10	70	0	70
SHS	Georgetown		Normal		9		10	90	2	92
SHS	Georgetown		Preservative Free			138	10	0	0	138
SHS	Milford	VFC	Preservative Free			10	10	0	0	10
SHS	Milford	VFC			8		10	80	0	80
SHS	Milford		Normal		34		10	340	1	341
SHS	Milford		Preservative Free			154	10	0	0	154
SHS	Seaford	VFC	Preservative Free			0	10	0	0	0
SHS	Seaford	VFC			7		10	70	5	75
SHS	Seaford		Normal		8		10	80	1	81
SHS	Seaford		Preservative Free			138	10	0	0	138
SHS	Williams	VFC	Preservative Free			26	10	0	0	26
SHS	Williams	VFC			8		10	80	0	80
SHS	Williams		Normal		16		10	160	9	169
SHS	Williams		Preservative Free			138	10	0	0	138

2. Distribution Guidance										
				</						

3. Distribution Plan

Clinic Location	Program	Type	Lot Number	Total Dose Requirement	Vials Required	Current Location	Agency to Provide Vaccine	Primary Use Vials to Deliver	Reserve Stock Vials to Deliver	Prefilled Syringes to Deliver
Site A	NA	NA	NA	1	0.1				0	0
	NA	NA	NA			DHCI	DHCI	0.1	0	0
Site B	NA	NA	NA	1	0.1				0	0
	NA	NA	NA			DHCI	DHCI	0.1	0	0
Site C	NA	NA	NA	1	0.1				0	0
	NA	NA	NA			DHCI	DHCI	0.1	0	0
Site E	NA	NA	NA	1	0.1				0	0
	NA	NA	NA			DHCI	DHCI	0.1	0	0
Site F	NA	NA	NA	1	0.1				0	0
	NA	NA	NA			DHCI	DHCI	0.1	0	0
Site G	NA	NA	NA	1	0.1				0	0
	NA	NA	NA			DHCI	DHCI	0.1	0	0
Site H	NA	NA	NA	1	0.1				0	0
	NA	NA	NA			DHCI	DHCI	0.1	0	0

Tab F Distribution

Distribution:

- 1.0 911 Call Centers - Dover
- 2.0 911 Call Centers - Kent County
- 3.0 911 Call Centers - New Castle County
- 4.0 911 Call Centers - Newark
- 5.0 911 Call Centers - Rehoboth
- 6.0 911 Call Centers - Seaford
- 7.0 911 Call Centers - Sussex County
- 8.0 911 Call Centers - University of Delaware
- 9.0 911 Call Centers - Wilmington
- 10.0 ALS Chief - Kent County
- 11.0 ALS Chief - New Castle County
- 12.0 ALS Chief - Sussex County
- 13.0 CDC (Hard Copy and CD)
- 14.0 DAFB (Hard Copy and CD)
- 15.0 DDA Office of the Secretary (Hard Copy and CD)
- 16.0 DELDOT Office of the Secretary (Hard Copy and CD)
- 17.0 DEMA – EOC
- 18.0 DEMA – Director (Hard Copy and CD)
- 19.0 DFDA-Delaware Funeral Directors Association
- 20.0 Department of Health and Human Services
- 21.0 DHSS Office of the Secretary (Hard Copy and CD)
- 22.0 DHSS Public Affairs (Hard Copy and CD)
- 23.0 DHSS / DMS
- 24.0 DHSS / DSS
- 25.0 DHSS / DSAMH
- 26.0 DHSS / DCSE
- 27.0 DHSS / DSAAPD
- 28.0 DHSS / DDS
- 29.0 DHSS / DLTCRP
- 30.0 DHSS / DMMA
- 31.0 DHSS / OCME
- 32.0 DHSS / DVI
- 33.0 DHSS / DSSC
- 34.0 DNG (3) (Hard Copy and CD)
- 35.0 DSHS Office of the Secretary (Hard Copy and CD)
- 36.0 DSP - Special Operations (Hard Copy and CD)
- 37.0 DSP - Superintendent's Office
- 38.0 EMA City of Wilmington (Hard Copy and CD)
- 39.0 EMA Kent County (Hard Copy and CD)
- 40.0 EMA New Castle County (Hard Copy and CD)
- 41.0 EMA Sussex County (Hard Copy and CD)

- 42.0 EMS Med Dir (Hard Copy and CD)
- 43.0 FBI Wilmington Field Office (Hard Copy and CD)
- 44.0 Federal Marshall Service
- 45.0 Governor's Office (Hard Copy and CD)
- 46.0 A.I. DuPont Hospital (Hard Copy and CD)
- 47.0 Beebe Medical Center (Hard Copy and CD)
- 48.0 Christiana Hospital (Hard Copy and CD)
- 49.0 Kent General Hospital (Hard Copy and CD)
- 50.0 Milford Memorial Hospital (Hard Copy and CD)
- 51.0 Nanticoke Hospital (Hard Copy and CD)
- 52.0 St. Francis Hospital (Hard Copy and CD)
- 53.0 Veterans Affairs Medical Center (Hard Copy and CD)
- 54.0 Wilmington Hospital (Hard Copy and CD)
- 55.0 HRSA (Hard Copy and CD)
- 56.0 Representative Castle (Hard Copy and CD)
- 57.0 Senator Biden (Hard Copy and CD)
- 58.0 Senator Carper (Hard Copy and CD)

Additional copies of this plan will be distributed to SHOC staff in accordance with the SHOC Plans Distribution Matrix that is maintained by PHPS under a separate cover.